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* * * * * Welcome to STN International * * * * *

| | | | |
|------|---------|---|--|
| NEWS | 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | OCT 04 | Precision of EMBASE searching enhanced with new chemical name field |
| NEWS | 3 | OCT 06 | Increase your retrieval consistency with new formats or for Taiwanese application numbers in CA/CAPLUS. |
| NEWS | 4 | OCT 21 | CA/CAPLUS kind code changes for Chinese patents increase consistency, save time |
| NEWS | 5 | OCT 22 | New version of STN Viewer preserves custom highlighting of terms when patent documents are saved in .rtf format |
| NEWS | 6 | OCT 28 | INPADOCDB/INPAFAMDB: Enhancements to the US national patent classification. |
| NEWS | 7 | NOV 03 | New format for Korean patent application numbers in CA/CAPLUS increases consistency, saves time. |
| NEWS | 8 | NOV 04 | Selected STN databases scheduled for removal on December 31, 2010 |
| NEWS | 9 | NOV 18 | PROUSDDR and SYNTHLINE Scheduled for Removal December 31, 2010 by Request of Prou Science |
| NEWS | 10 | NOV 22 | Higher System Limits Increase the Power of STN Substance-Based Searching |
| NEWS | 11 | NOV 24 | Search an additional 46,850 records with MEDLINE backfile extension to 1946 |
| NEWS | 12 | DEC 14 | New PNK Field Allows More Precise Crossover among STN Patent Databases |
| NEWS | 13 | DEC 18 | ReaxysFile available on STN |
| NEWS | 14 | DEC 21 | CAS Learning Solutions -- a new online training experience |
| NEWS | 15 | DEC 22 | Value-Added Indexing Improves Access to World Traditional Medicine Patents in CAPLUS |
| NEWS | 16 | JAN 24 | The new and enhanced DPCI file on STN has been released |
| NEWS | 17 | JAN 26 | Improved Timeliness of CAS Indexing Adds Value to USPATFULL and USPAT2 Chemistry Patents |
| NEWS | 18 | JAN 26 | Updated MeSH vocabulary, new structured abstracts, and other enhancements improve searching in STN reload of MEDLINE |
| NEWS | 19 | JAN 28 | CABA will be updated weekly |
| NEWS | 20 | FEB 23 | PCTFULL file on STN completely reloaded |
| NEWS | 21 | FEB 23 | STN AnaVist Test Projects Now Available for Qualified Customers |
| NEWS | 22 | FEB 25 | LPCI will be replaced by LDPCI |
| | | | |
| NEWS | EXPRESS | FEBRUARY 15 10 | CURRENT WINDOWS VERSION IS V8.4.2, AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011. |
| | | | |
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***** STN Columbus *****

FILE 'HOME' ENTERED AT 19:49:26 ON 01 MAR 2011

=>

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.23

0.23

FILE 'REGISTRY' ENTERED AT 19:49:53 ON 01 MAR 2011

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STRUCTURE FILE UPDATES: 28 FEB 2011 HIGHEST RN 1265276-96-7

DICTIONARY FILE UPDATES: 28 FEB 2011 HIGHEST RN 1265276-96-7

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

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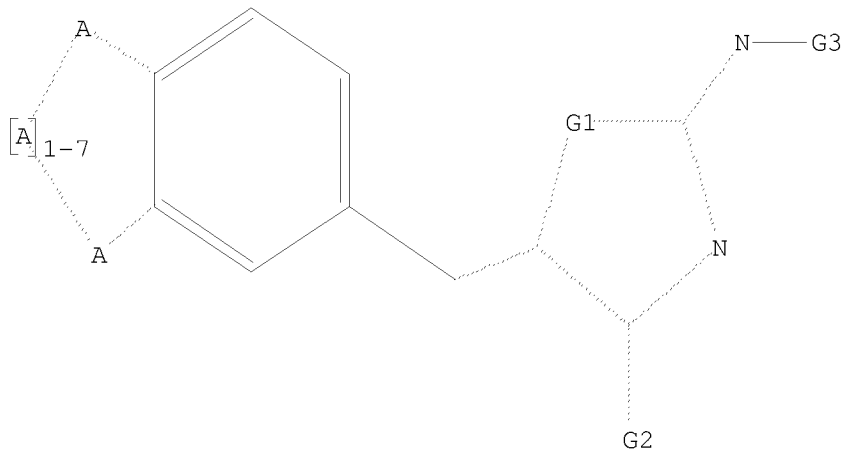
Uploading C:\Program Files\STNEXP\Queries\10.565976\20110301-sa.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 O, S, N

G2 O, S

G3 C, S, O

Structure attributes must be viewed using STN Express query preparation.

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=> s l1 sss sam
SAMPLE SEARCH INITIATED 19:50:47 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -      2474 TO ITERATE
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100.0% PROCESSED      2474 ITERATIONS      19 ANSWERS
SEARCH TIME: 00.00.01
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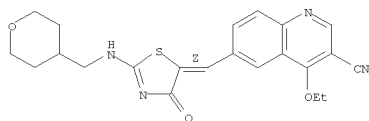
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FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:    46497 TO    52463
PROJECTED ANSWERS:       119 TO      641
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L2      19 SEA SSS SAM L1
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```
=> d scan
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L2 19 ANSWERS REGISTRY COPYRIGHT 2011 ACS on STN
 IN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[[{(tetrahydro-2H-pyran-4-yl)methyl]amino]-5(4H)-thiazolylidene)methyl]-
 MF C22 H22 N4 O3 S

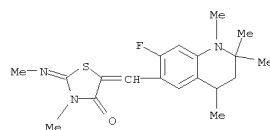
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

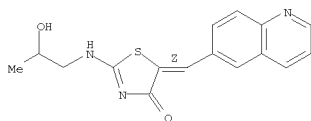
L2 19 ANSWERS REGISTRY COPYRIGHT 2011 ACS on STN
 IN 4-Thiazolidinone, 5-[(7-fluoro-1,2,3,4-tetrahydro-1,2,2,4-tetramethyl-6-quinoliny)methylene]-3-methyl-2-(methyylimino)-
 MF C19 H24 F N3 O S



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 19 ANSWERS REGISTRY COPYRIGHT 2011 ACS on STN
 IN 4(5H)-Thiazolone, 2-[(2-hydroxypropyl)amino]-5-(6-quinoliny)methylene)-,
 (5Z)-
 MF C16 H15 N3 O2 S

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l1 sss full
FULL SEARCH INITIATED 19:51:05 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 49165 TO ITERATE

100.0% PROCESSED 49165 ITERATIONS 484 ANSWERS
SEARCH TIME: 00.00.01

L3 484 SEA SSS FUL L1

| => file caplus | SINCE FILE | TOTAL |
|----------------------|------------|---------|
| COST IN U.S. DOLLARS | ENTRY | SESSION |
| FULL ESTIMATED COST | 197.37 | 197.60 |

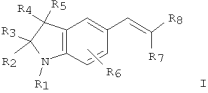
FILE 'CAPLUS' ENTERED AT 19:51:10 ON 01 MAR 2011
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FILE COVERS 1907 - 1 Mar 2011 VOL 154 ISS 10
FILE LAST UPDATED: 28 Feb 2011 (20110228/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010

L4 ANSWER 1 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:811884 CAPLUS
DOCUMENT NUMBER: 153:137745
TITLE: Probe for a biological specimen and labeling method
and screening method using the probe
INVENTOR(S): Shinto, Taichi; Miyazaki, Takeshi; Hirose, Masashi;
Ookubo, Taketoshi; Watanabe, Kohei; Nomoto, Tsuyoshi;
Tanaka, Toshio; Nishimura, Yuhei; Shimada, Yasuhito;
Nishimura, Norihiro
PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 101pp.
CODEN: PIXKD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

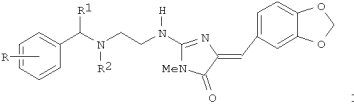
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--------|------------|-----------------|------------|
| WO 2010074326 | A1 | 20100701 | WO 2009-JP71866 | 20091224 |
| W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| JP 2010169678 | A | 20100805 | JP 2009-292716 | 20091224 |
| PRIORITY APPLN. INFO.: | | | JP 2008-330987 | A 20081225 |
| OTHER SOURCE(S): | MARPAT | 153:137745 | | |
| GI | | | | |



AB Provided is a novel probe for a biol. specimen for labeling by itself and clearly visualizing one of a specific cell and a specific cell organ in a living body, the probe having excellent spectral characteristics and exhibiting excellent storage stability. The probe for a biol. specimen contains, as an active agent, at least one kind of compound represented by a general formula (I, wherein R1 represents one of a hydrogen atom, an alkyl group, an aralkyl group, an alkenyl group, an aryl group, a heterocyclic group, and an acyl group; R2 to R5 each independently represent one of a hydrogen atom, an alkyl group, an aryl group, a carboxylic acid group, a carboxylic acid ester group, and an acyl group, and R2 and R4 may be bonded to each other to form a ring; and R6 represents one of a hydrogen atom, an alkyl group, an alkoxy group, and a halogen atom, R7 and R8 each independently represent one of a hydrogen atom, an alkenyl group, a cyano group, a carboxylic acid group, a carboxylic acid ester group, a sulfonic acid group, an acyl group, and a heterocyclic group, and R7 and R8 may be bonded to each other to form a ring).

IT 1233712-35-0

L4 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:86055 CAPLUS
DOCUMENT NUMBER: 152:311797
TITLE: Synthesis and preliminary biological evaluation of new derivatives of the marine alkaloid leucettamine B as kinase inhibitors
AUTHOR(S): Debdbab, Mansour; Renault, Steven; Lozach, Olivier; Meijer, Laurent; Paquin, Ludovic; Carreaux, Francois; Bazureau, Jean-Pierre
CORPORATE SOURCE: Sciences Chimiques de Rennes, UMR CNRS 6226, Groupe Ingenierie Chimique
& Molecules pour le Vivant (ICMV),
SOURCE: Universite de Rennes 1, Rennes, 35042, Fr.
European Journal of Medicinal Chemistry (2010), 45(2), 805-810
CODEN: EJMCAS; ISSN: 0223-5234
PUBLISHER: Elsevier Masson SAS
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 152:311797
GI



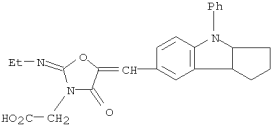
AB New derivs., I (R = Ph, 4-MeOC6H4, 3,4-methylenedioxyphenyl, etc.; R1R2 = bond; R1 = R2 = H), of the marine alkaloid leucettamine B were prepared in five steps with overall yields ranging from 23 to 30%. The key step of our strategy has been the sulfur/nitrogen displacement under solvent-free microwave irradiation of (5Z)-5-benzo[1,3]-dioxo-5-ylmethylene-2-ethylsulfanyl-3,5-dihydroimidazol-4-one with mono-Boc-protected ethylenediamine. After deprotection of the N-Boc group, the amino derivative of leucettamine B was subjected to reductive amination in two steps with retention of configuration of the double bond, to lead to eight new analogs of leucettamine B. The effect of these compds. on CK1a/β, CDK5/p25, and GSK-3α/β were investigated.

IT 1213706-22-9P 1213706-23-0P 1213706-25-2P
1213706-26-3P 1213706-27-4P 1213706-28-5P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation of leucettamine B derivs. via microwave-induced substitution reaction and inhibition of kinases related Alzheimer's disease)

RN 1213706-22-9 CAPLUS
CN 4H-Imidazol-4-one, 2-[(2-aminoethyl)amino]-5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-, hydrochloride (1:1), (5Z)- (CA INDEX NAME)

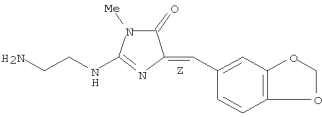
Double bond geometry as shown.

L4 ANSWER 1 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); DGN (Diagnostic use); PRPH (Prophetic); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(probe for a biol. specimen and labeling method and screening method using the probe)
RN 1233712-35-0 CAPLUS
CN 3-Oxazolidineacetic acid, 2-(ethylimino)-5-[(1,2,3,3a,4,8b-hexahydro-4-phenylcyclopent[b]indol-7-yl)methylene]-4-oxo- (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

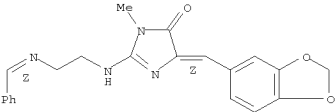
L4 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



● HCl

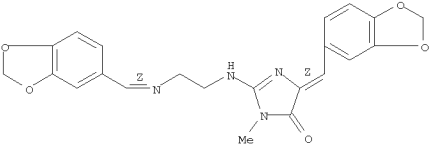
RN 1213706-23-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-[(Z)-(phenylmethylene)amino]ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



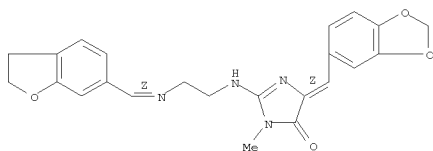
RN 1213706-25-2 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[(Z)-(1,3-benzodioxol-5-ylmethylene)amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



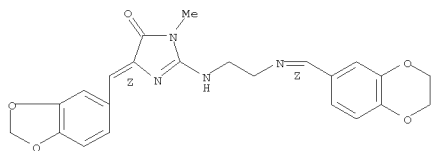
RN 1213706-26-3 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[(Z)-[(2,3-dihydro-6-benzofuranyl)methylene]amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



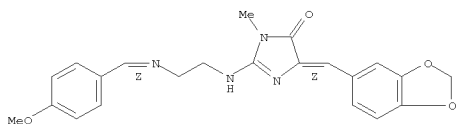
RN 1213706-27-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[(Z)-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



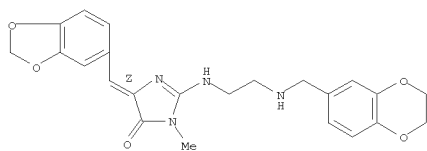
RN 1213706-28-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[[2-[(Z)-[(4-methoxyphenyl)methylene]amino]ethyl]amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



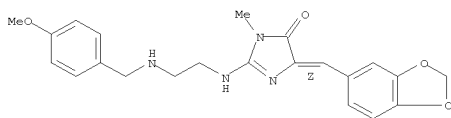
IT 1213706-24-1P 1213706-32-1P 1213706-33-2P
1213706-34-3P 1213706-35-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of leucettamine B derivs. via microwave-induced substitution reaction and inhibition of kinases related Alzheimer's disease)
RN 1213706-24-1 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-[(phenylmethyl)amino]ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



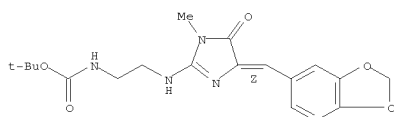
RN 1213706-35-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[[2-[[[(4-methoxyphenyl)methyl]amino]ethyl]amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



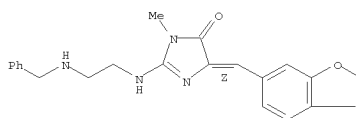
IT 1213706-21-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of leucettamine B derivs. via microwave-induced substitution reaction and inhibition of kinases related Alzheimer's disease)
RN 1213706-21-8 CAPLUS
CN Carbamic acid, N-[2-[[[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]amino]ethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Double bond geometry as shown.



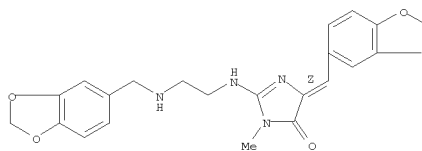
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1213706-36-5P 1213706-37-6P 1213706-38-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of leucettamine B derivs. via microwave-induced substitution reaction and inhibition of kinases related Alzheimer's disease)
RN 1213706-29-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-[(Z)-[(4-nitrophenyl)methylene]amino]ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



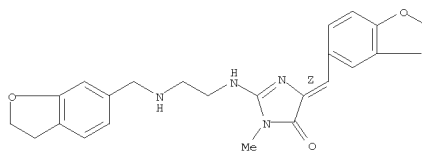
RN 1213706-32-1 CAPLUS
CN 4H-Imidazol-4-one, 2-[[2-[(1,3-benzodioxol-5-ylmethyl)amino]ethyl]amino]-5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



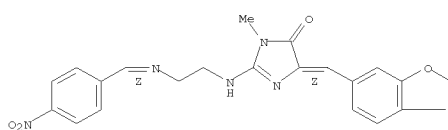
RN 1213706-33-2 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[(2,3-dihydro-6-benzofuranyl)methyl]amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



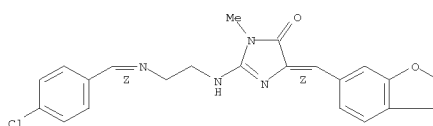
RN 1213706-34-3 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[(2,3-dihydro-1,4-benzodioxin-6-yl)methyl]amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



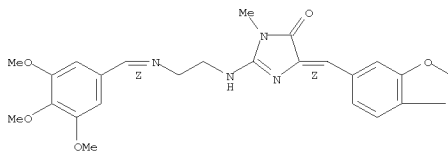
RN 1213706-30-9 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[(Z)-[(4-chlorophenyl)methylene]amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



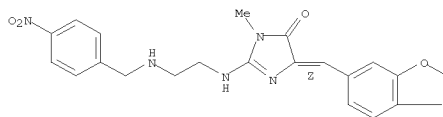
RN 1213706-31-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-[(Z)-[(3,4,5-trimethoxyphenyl)methylene]amino]ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 1213706-36-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-[[[(4-nitrophenyl)methyl]amino]ethyl]amino]-, (5Z)- (CA INDEX NAME)

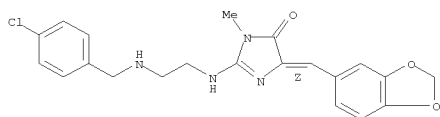
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RN 1213706-37-6 CAPLUS

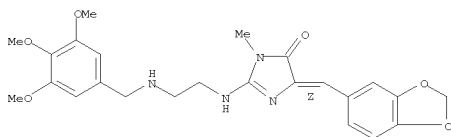
L4 ANSWER 2 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[[2-[[4-chlorophenyl)methyl]amino]ethyl]amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 1213706-38-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-[[3,4,5-trimethoxyphenyl)methyl]amino]ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



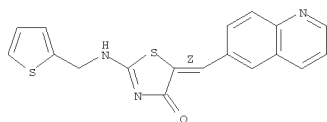
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:825033 CAPLUS
DOCUMENT NUMBER: 151:145654
TITLE: Protein kinase genes showing altered levels of expression in breast cancer tissue and their diagnostic use
INVENTOR(S): Bertucci, Francois; Birnbaum, Daniel; Finetti, Pascal
PATENT ASSIGNEE(S): IPSOGEN, Fr.; INSERM-Institut National de la Sante et de la Recherche Medicale; Institut Paoli-Calmettes
SOURCE: PCT Int. Appl., 97pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|-----------------|------------|
| WO 2009083780 | A1 | 20090709 | WO 2008-IB3622 | 20081224 |
| W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| EP 2235211 | A1 | 20101006 | EP 2008-866065 | 20081224 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS | | | |
| US 20110014191 | A1 | 20110120 | US 2010-810576 | 20100929 |
| PRIORITY APPLN. INFO.: | | | US 2007-9395P | P 20071228 |
| | | | WO 2008-IB3622 | W 20081224 |

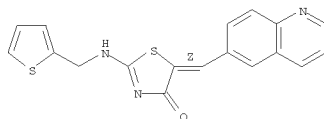
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The present invention relates to a method for analyzing cancer.e.g., breast cancer comprising detection of differential expression of at least one of the 16 genes encoding serine/threonine kinases listed in Table 1, or of said 16 genes, and to a polynucleotide library comprising at least one said 16 genes. A method of diagnosing breast cancer by anal. of the levels of expression of members of a group of 16 protein kinase genes is described. Levels of expression of the genes can also be used in prognosis and in monitoring the effectiveness of therapies. The levels of expression of these genes were analyzed in 227 samples of breast cancer tissue as part of a larger anal. of gene expression in breast cancer. Validation of the use of these genes in diagnosis and in prognosis is demonstrated.
IT 872573-93-8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (selection for cancer therapy; protein kinase genes showing altered levels of expression in breast cancer tissue and their diagnostic use)
RN 872573-93-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)
Double bond geometry as shown.

L4 ANSWER 3 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



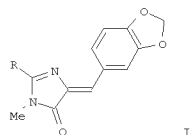
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:730087 CAPLUS
DOCUMENT NUMBER: 151:543094
TITLE: Cyclin-dependent kinase 1 inhibitor RO-3306 enhances p53-mediated Bax activation and mitochondrial apoptosis in AML
AUTHOR(S): Kojima, Kensuke; Shimanuki, Masaya; Shikami, Masato; Andreeff, Michael; Nakakuma, Hideki
CORPORATE SOURCE: Department of Hematology/Oncology, Wakayama Medical University, Wakayama, Japan
SOURCE: Cancer Science (2009), 100(6), 1128-1136
CODEN: CSACCM; ISSN: 1347-9032
PUBLISHER: Wiley-Blackwell
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cyclin-dependent kinase (CDK) 1 and the murine double minute 2 homolog (MDM2)-p53 interaction are potential therapeutic targets in cancer, and their inhibition has been reported to be more proapoptotic in malignant cells compared to normal cells. We investigated the effect of CDK1 inhibition on p53 signaling after simultaneous dual blockade using the CDK1 inhibitor RO-3306 and the MDM2 inhibitor Nutlin-3 in AML. Treatment of growing AML cells with RO-3306 induced G2/M-phase cell cycle arrest and apoptosis in a dose- and time-dependent manner. We found that RO-3306 acts cooperatively with Nutlin-3 to induce mitochondrial apoptosis in a cell cycle-independent fashion. RO-3306 downregulated expression of the antiapoptotic proteins Bcl-2 and survivin and blocked p53-mediated induction of p21 and MDM2. CDK1 siRNA expts. showed that reduced CDK1 expression affects p53-induced p21 transactivation. We suggest that RO-3306 actively enhances downstream p53 signaling to promote apoptosis and that a combination strategy aimed at both inhibiting CDK1 and activating p53 signaling is potentially effective in AML, where TP53 mutations are rare and downstream p53 signaling is intact.
IT 872573-93-8, RO-3306
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (RO-3306 enhanced nutlin-3-induced p53 protein-mediated Bax protein activation and mitochondrial apoptosis in human acute myeloid leukemia cell)
RN 872573-93-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)
Double bond geometry as shown.



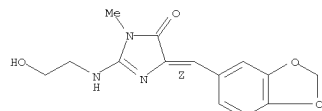
OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:585095 CAPLUS
DOCUMENT NUMBER: 151:124209
TITLE: An efficient method for the preparation of new analogs of leucettamine B under solvent-free microwave irradiation
AUTHOR(S): Debda, Mansour; Renault, Steven; Eid, Samar; Lozach, Olivier; Meijer, Laurent; Carreaux, Francois; Bazureau, Jean Pierre
CORPORATE SOURCE: Sciences Chimiques de Rennes, UMR CNRS 6226, Groupe Ingenierie Chimique
& Molecules pour le Vivant (ICMV),
SOURCE: Universite de Rennes 1, Rennes, 35042, Fr.
Heterocycles (2009), 78(5), 1191-1203
CODEN: HTCYAM; ISSN: 0385-5414
PUBLISHER: Japan Institute of Heterocyclic Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 151:124209
GI



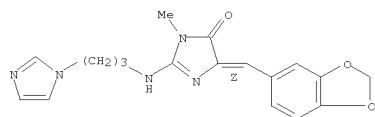
AB A simple and efficient microwave-assisted protocol has been developed for the synthesis of new 2-amino-3,4-dihydro-4H-imidazol-4-one derivs. of leucettamine B. This solvent-free protocol involves sulfur/nitrogen displacement of 2-ethylthio-5-arylidene-imidazolone I (R = SEt) with a variety of functionalized polar primary amines and this general method afforded a small library of the desired pure products, e.g. I (R = PhNH) in yields ranging from 33 to 92% in moderate reaction times (30-100 min).
IT 1112978-43-4P 1112978-45-6P 1112978-51-4P
1112978-54-7P 1112978-66-1P 1112978-20-6P
1168150-21-7P 1168150-22-8P 1168150-23-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(efficient method for the preparation of analogs of leucettamine B via coupling reaction under solvent-free microwave irradiation)
RN 1112978-43-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(2-hydroxyethyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



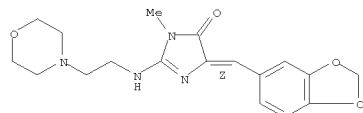
RN 1112978-45-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2,3-dihydroxypropyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

L4 ANSWER 5 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
Double bond geometry as shown.



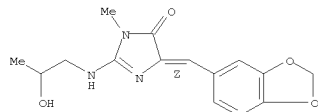
RN 1168150-21-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[[2-(4-morpholinyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



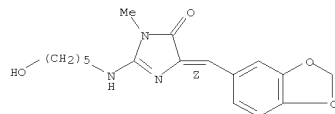
RN 1168150-22-8 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(2-hydroxypropyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



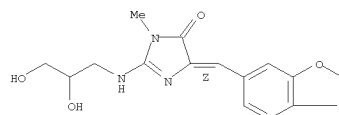
RN 1168150-23-9 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(5-hoxyppentyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



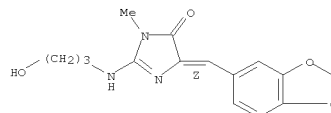
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
Double bond geometry as shown.



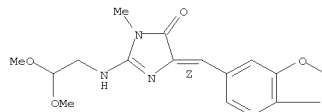
RN 1112978-51-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(3-hydroxypropyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



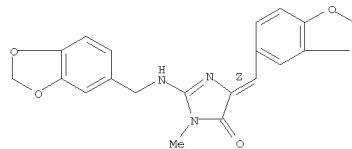
RN 1112978-54-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2,2-dimethoxyethyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 1112978-66-1 CAPLUS
CN 4H-Imidazol-4-one, 2-[[1,3-benzodioxol-5-ylmethyl]amino]-5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

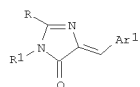


RN 1168150-20-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[[3-(1H-imidazol-1-yl)propyl]amino]-3-methyl-, (5Z)- (CA INDEX NAME)

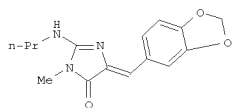
L4 ANSWER 6 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:491763 CAPLUS
DOCUMENT NUMBER: 150:472956
TITLE: Preparation of imidazolone derivatives, derivatives of marine alkaloid Leucettamine B as dual specificity tyrosine-regulated kinase-1A inhibitors
INVENTOR(S): Carreaux, Francois; Bazureau, Jean-Pierre; Renault, Steven; Meijer, Laurent; Lozach, Olivier
PATENT ASSIGNEE(S): Universite De Rennes 1, Fr.; Centre National De La Recherche Scientifique (C.N.R.S.)
SOURCE: PCT Int. Appl., 54pp.; Chemical Indexing Equivalent to 150:214566 (FR)
CODEN: PIXKD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2009050352 | A2 | 20090423 | WO 2008-FR1152 | 20080801 |
| WO 2009050352 | A3 | 20090723 | | |
| W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | |
| FR 2919608 | A1 | 20090206 | FR 2007-5632 | 20070801 |
| CA 2694377 | A1 | 20090423 | CA 2008-2694377 | 20080801 |
| KR 2010051698 | A | 20100517 | KR 2010-7004568 | 20080801 |
| EP 2185547 | A2 | 20100519 | EP 2008-838929 | 20080801 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, AL, BA, MK, RS | | | |
| JP 2010535180 | T | 20101118 | JP 2010-518711 | 20080801 |
| MX 2010001170 | A | 20100625 | MX 2010-1170 | 20100129 |
| IN 2010DN01081 | A | 20100723 | IN 2010-DN1081 | 20100217 |
| CN 101784542 | A | 20100721 | CN 2008-80103961 | 20100222 |
| US 20100216855 | A1 | 20100826 | US 2010-452940 | 20100426 |
| PRIORITY APPLN. INFO.: | | | FR 2007-5632 | A 20070801 |
| OTHER SOURCE(S): | | | WO 2008-FR1152 | W 20080801 |
| GI | | | | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 150:472956
GI



I



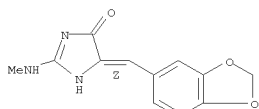
II

AB Title comps. I [R1 = H, (un)substituted alkyl, (hetero)aryl; Ar1 = (un)substituted aryl with 2 adjacent substituents optionally forming a 5-6 membered ring, or a heteroaryl optionally condensed with a 5-6 membered aryl ring with the heteroatom selected from N, S, O; R = SR2, NHR3, NHCOR4, Ar2; R2 = (un)substituted alkyl, vinyl, benzyl, etc.; R3 = H, R2; Ar2 = (un)substituted aryl with 2 adjacent substituents optionally forming a 5-6 membered ring] were prepared as inhibitors of dual specificity tyrosine-regulated kinase-1A (DYRK1A). Thus, imidazolone II, prepared from glycine Me ester hydrochloride, inhibited DYRK1A with IC50 = 2.3 μ M. I are useful for treating Alzheimers, taupathies, trisomy 21, Pick's disease and neurodegenerative disorders (no data).

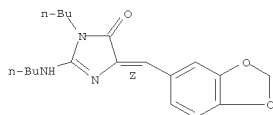
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 1112978-41-2P 1112978-42-3P 1112978-43-4P
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 1112978-71-8P 1112978-72-9P 1112978-81-0P
 1112978-82-1P 1112978-83-2P 1112978-86-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (drug candidate; preparation of Leucettamine B derivs. as DYRK1A inhibitors)

RN 257869-46-8 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-(methylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

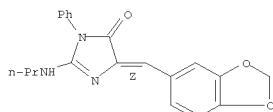


RN 257869-53-7 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(phenylethyl)amino]-, (5Z)- (CA INDEX NAME)



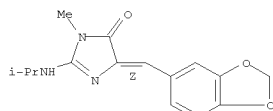
RN 451455-70-2 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-phenyl-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



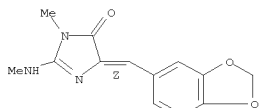
RN 451455-73-5 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(1-methylethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



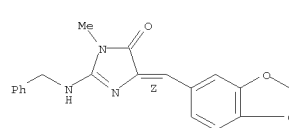
RN 1112978-40-1 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-(methylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



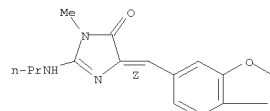
RN 1112978-41-2 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(ethylamino)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



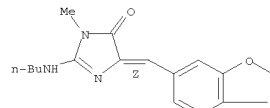
RN 451455-66-6 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



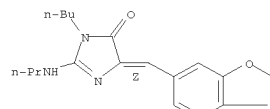
RN 451455-67-7 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(butylamino)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



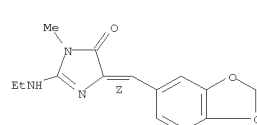
RN 451455-68-8 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-3,5-dihydro-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



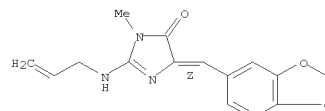
RN 451455-69-9 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-2-(butylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



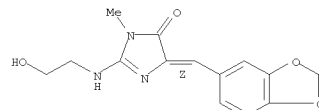
RN 1112978-42-3 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-(2-propen-1-ylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



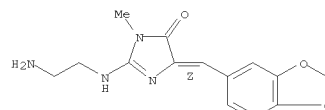
RN 1112978-43-4 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(2-hydroxyethyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



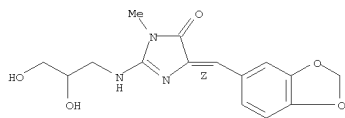
RN 1112978-44-5 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2-aminoethyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



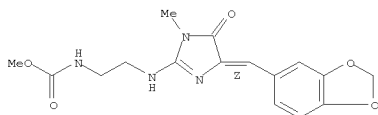
RN 1112978-45-6 CAPLUS
 CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2,3-dihydroxypropyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



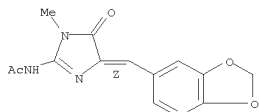
RN 1112978-46-7 CAPLUS
CN Carbamic acid, N-[2-[[[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]amino]ethyl]-, methyl ester (CA INDEX NAME)

Double bond geometry as shown.



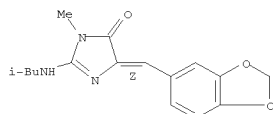
RN 1112978-47-8 CAPLUS
CN Acetamide, N-[4-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



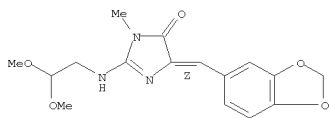
RN 1112978-48-9 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(2-methylpropyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



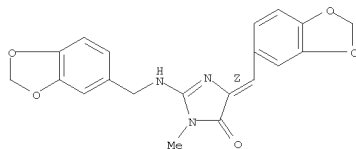
RN 1112978-49-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(cyclopropylmethyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



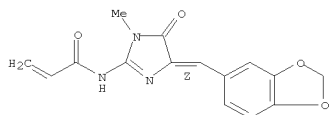
RN 1112978-66-1 CAPLUS
CN 4H-Imidazol-4-one, 2-[(1,3-benzodioxol-5-ylmethyl)amino]-5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



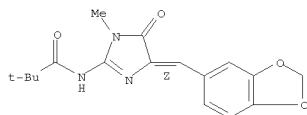
RN 1112978-67-2 CAPLUS
CN 2-Propenamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



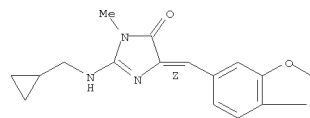
RN 1112978-68-3 CAPLUS
CN Propanamide, N-[4-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]-2,2-dimethyl- (CA INDEX NAME)

Double bond geometry as shown.



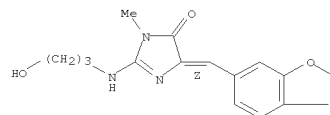
RN 1112978-69-4 CAPLUS
CN Benzamide, N-[4-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



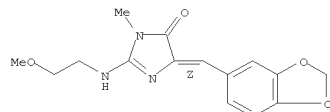
RN 1112978-51-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(3-hydroxypropyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



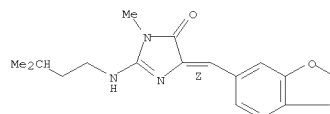
RN 1112978-52-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(2-methoxyethyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



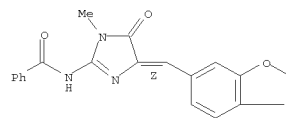
RN 1112978-53-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(3-methylbutyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



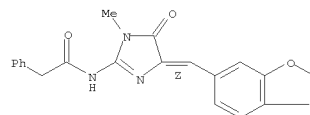
RN 1112978-54-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2,2-dimethoxyethyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



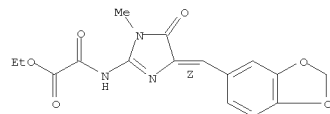
RN 1112978-70-7 CAPLUS
CN Benzenacetamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



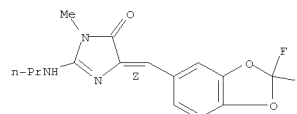
RN 1112978-71-8 CAPLUS
CN Acetic acid, 2-[[[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]amino]-2-oxo-, ethyl ester (CA INDEX NAME)

Double bond geometry as shown.



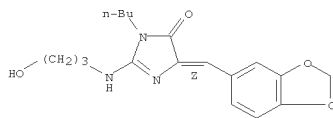
RN 1112978-72-9 CAPLUS
CN 4H-Imidazol-4-one, 5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-3,5-dihydro-3-methyl-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



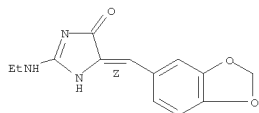
RN 1112978-81-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-3,5-dihydro-2-[(3-hydroxypropyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



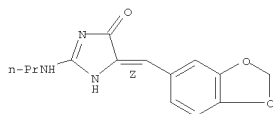
RN 1112978-82-1 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(ethylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



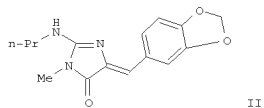
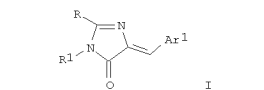
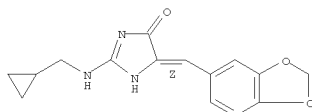
RN 1112978-83-2 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 1112978-86-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(cyclopropylmethylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

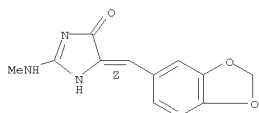


AB Title comps. I (R1 = H, (un)substituted alkyl, (hetero)aryl; Ar1 = (un)substituted aryl with 2 adjacent substituents optionally forming a 5-6 membered ring, or a heteroaryl optionally condensed with a 5-6 membered aryl ring with the heteroatom selected from N, S, O; R = SR2, NHR3, NHCOR4, Ar2; R2 = (un)substituted alkyl, vinyl, benzyl, etc.; R3 = H, R2; Ar2 = (un)substituted aryl with 2 adjacent substituents optionally forming a 5-6 membered ring] were prepared as inhibitors of dual specificity tyrosine-regulated kinase-1A (DYRK1A). Thus, imidazolone II, prepared from glycine Me ester hydrochloride, inhibited DYRK1A with IC50 = 2.3 μ M. I are useful for treating Alzheimers, taupathies, trisomy 21, Pick's disease and neurodegenerative disorders (no data).

IT 257869-46-8P 257869-53-7P 451455-66-6P
451455-67-7P 451455-68-8P 451455-69-9P
451455-70-2P 451455-73-5P 1112978-40-1P
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1112978-68-3P 1112978-69-4P 1112978-70-7P
1112978-71-8P 1112978-72-9P 1112978-81-0P
1112978-82-1P 1112978-83-2P 1112978-86-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of Leucettamine B derivs. as DYRK1A inhibitors)

RN 257869-46-8 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-(methylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

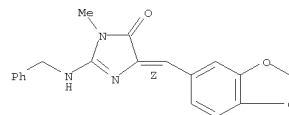


RN 257869-53-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(phenylmethyl)amino]-, (5Z)- (CA INDEX NAME)

L4 ANSWER 7 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2009:148372 CAPLUS
DOCUMENT NUMBER: 150:214566
TITLE: Preparation of imidazolone derivatives, derivatives of marine alkaloid Leucettamine B as dual specificity tyrosine-regulated kinase-1A inhibitors
INVENTOR(S): Carreaux, Francois; Bazureau, Jean Pierre; Renault, Steven; Meijer, Laurent; Lozach, Olivier
PATENT ASSIGNEE(S): Universite de Rennes 1, Fr.; Centre National de la Recherche Scientifique - CNRS
SOURCE: Fr. Demande, 71pp.; Chemical Indexing Equivalent to 150:472956 (WO)
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

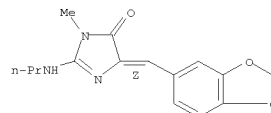
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-------------------|------------|
| FR 2919608 | A1 | 20090206 | FR 2007-5632 | 20070801 |
| CA 2694377 | A1 | 20090423 | CA 2008-2694377 | 20080801 |
| WO 2009050352 | A2 | 20090423 | WO 2008-FR1152 | 20080801 |
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| W: | AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
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| KR 2010051698 | A | 20100517 | KR 2010-7004568 | 20080801 |
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| | | | WO 2008-FR1152 | W 20080801 |
| ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT | | | | |
| OTHER SOURCE(S): | | | MARPAT 150:214566 | |
| GI | | | | |

Double bond geometry as shown.



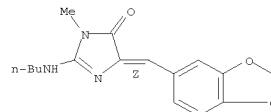
RN 451455-66-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



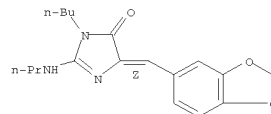
RN 451455-67-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(butylamino)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



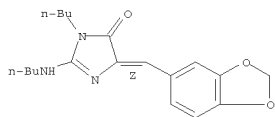
RN 451455-68-8 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-3,5-dihydro-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



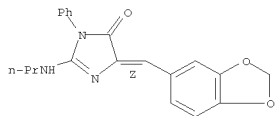
RN 451455-69-9 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-2-(butylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



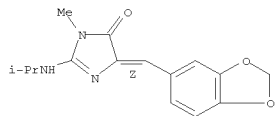
RN 451455-70-2 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-phenyl-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



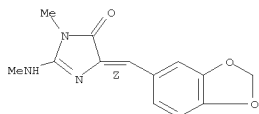
RN 451455-73-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(1-methylethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



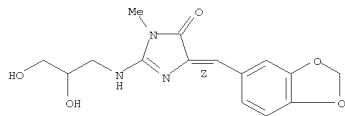
RN 1112978-40-1 CAPLUS
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Double bond geometry as shown.



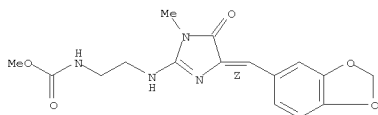
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Double bond geometry as shown.



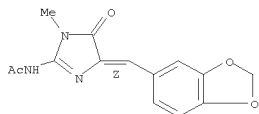
RN 1112978-46-7 CAPLUS
CN Carbamic acid, N-[2-[(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]amino]ethyl]-, methyl ester (CA INDEX NAME)

Double bond geometry as shown.



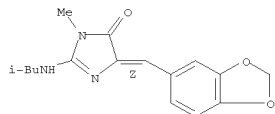
RN 1112978-47-8 CAPLUS
CN Acetamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



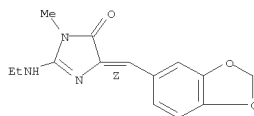
RN 1112978-48-9 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(2-methylpropyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



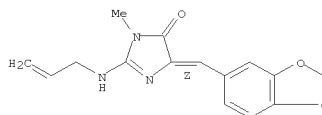
RN 1112978-49-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(cyclopropylmethyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



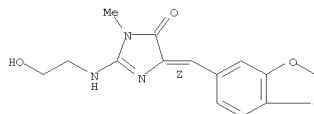
RN 1112978-42-3 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-(2-propen-1-ylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



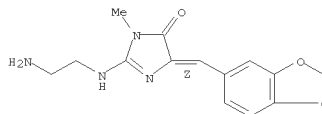
RN 1112978-43-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(2-hydroxyethyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



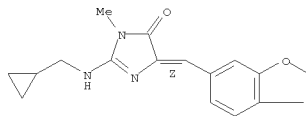
RN 1112978-44-5 CAPLUS
CN 4H-Imidazol-4-one, 2-[(2-aminoethyl)amino]-5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



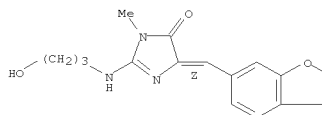
RN 1112978-45-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2,3-dihydroxypropyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



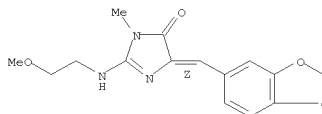
RN 1112978-51-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(3-hydroxypropyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



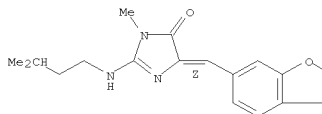
RN 1112978-52-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-[(2-methoxyethyl)amino]-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



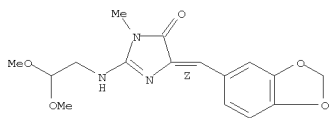
RN 1112978-53-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(3-methylbutyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



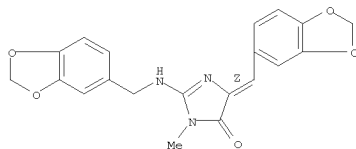
RN 1112978-54-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(2,2-dimethoxyethyl)amino]-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



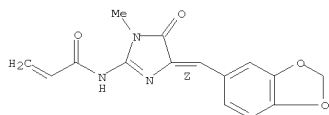
RN 1112978-66-1 CAPLUS
CN 4H-Imidazol-4-one, 2-[(1,3-benzodioxol-5-ylmethyl)amino]-5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



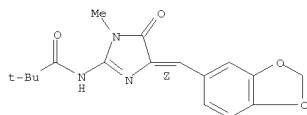
RN 1112978-67-2 CAPLUS
CN 2-Propenamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



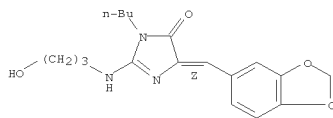
RN 1112978-68-3 CAPLUS
CN Propanamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]-2,2-dimethyl- (CA INDEX NAME)

Double bond geometry as shown.



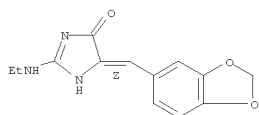
RN 1112978-69-4 CAPLUS
CN Benzamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



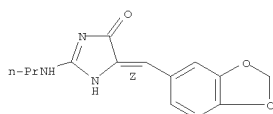
RN 1112978-82-1 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(ethylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



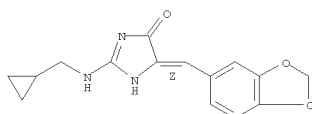
RN 1112978-83-2 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

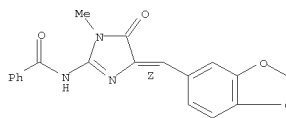


RN 1112978-86-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(cyclopropylmethylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

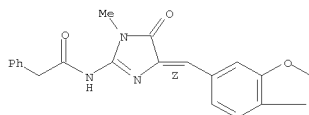


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT



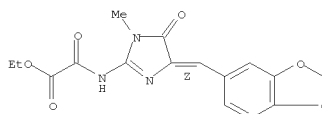
RN 1112978-70-7 CAPLUS
CN Benzeneacetamide, N-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



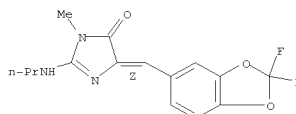
RN 1112978-71-8 CAPLUS
CN Acetic acid, 2-[(4Z)-4-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]amino]-2-oxo-, ethyl ester (CA INDEX NAME)

Double bond geometry as shown.



RN 1112978-72-9 CAPLUS
CN 4H-Imidazol-4-one, 5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-3,5-dihydro-3-methyl-2-(propylamino)-, (5Z)- (CA INDEX NAME)

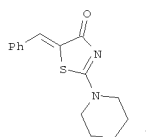
Double bond geometry as shown.



RN 1112978-81-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-3,5-dihydro-2-[(3-hydroxypropyl)amino]-, (5Z)- (CA INDEX NAME)

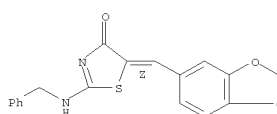
Double bond geometry as shown.

L4 ANSWER 8 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:1462272 CAPLUS
DOCUMENT NUMBER: 150:168212
TITLE: Three-component one-pot synthetic route to 2-amino-5-alkylidene-thiazol-4-ones
AUTHOR(S): Anderlüh, Marko; Jukic, Marko; Petric, Rok
CORPORATE SOURCE: Department of Medicinal Chemistry, Faculty of Pharmacy, University of Ljubljana, Ljubljana, 1000, Slovenia
SOURCE: Tetrahedron (2008), Volume Date 2009, 65(1), 344-350
CODEN: TETRA; ISSN: 0040-4020
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 150:168212
GI



AB A fast and straightforward three-component reaction to 2-amino-5-alkylidene-thiazol-4-ones, e.g., I, is described. The one-pot methodol., reported for the first time, involves Knoevenagel condensation of aromatic aldehydes and rhodanine followed by displacement of the thiocarbonyl sulfur with primary or secondary amines in the same reaction mixture. The reactions were performed using a dedicated microwave reactor, which enabled short reaction times and easy work-up.
IT 1107591-69-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective preparation of amino alkylidene thiazolones via subsequent Knoevenagel condensation and addition-elimination of aryl/heteroaryl aldehydes, rhodanine and primary/cyclic amines)
RN 1107591-69-4 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(phenylmethyl)amino]-, (5Z)- (CA INDEX NAME)

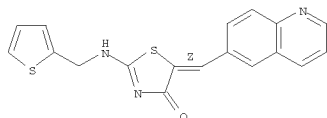
Double bond geometry as shown.



OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)
REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 9 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2008:919058 CAPLUS
DOCUMENT NUMBER: 149:439602
TITLE: CDK1 inhibitors antagonize the immediate apoptosis triggered by spindle disruption but promote apoptosis following the subsequent rereplication and abnormal mitosis
AUTHOR(S): Chan, Ying Wai; Ma, Hoi Tang; Wong, Winnie; Ho, Chui Chui; On, Kin Fan; Poon, Randy Y. C.
CORPORATE SOURCE: Department of Cell Biology, Max Planck Institute of Biochemistry, Martinsried, Germany
SOURCE: Cell Cycle (2008), 7(10), 1449-1461
CODEN: CCEYAS; ISSN: 1538-4101
PUBLISHER: Landes Bioscience
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Spindle-disrupting agents and CDK inhibitors are important cancer therapeutic agents. Spindle toxins activate the spindle-assembly checkpoint and lead to sustained activation of CDK1. Different published results indicate that CDK1 activity is either important or dispensable for the cytotoxicity associated with spindle disruption. Using live cell imaging and various approaches that uncoupled mitotic events, we show that apoptosis was induced by both prolonged nocodazole treatment as well as by inhibition of CDK1 activity after a transient nocodazole block. However, distinct mechanisms are involved in the two types of cell death. The massive apoptosis triggered by nocodazole treatment requires the continuous activation of cyclin B1-CDK1 and is antagonized by premature mitotic slippage. By contrast, apoptosis induced by nocodazole followed by CDK inhibitors occurred after rereplication and multipolar mitosis of the subsequent cell cycle. The presence of dual mechanisms of cytotoxicity mediated by spindle disruption and CDK inhibition may reconcile the various apparent inconsistent published results. These data underscore the essential role of cyclin B1-CDK1 as the basis of apoptosis during mitotic arrest, and the role of mitotic slippage and abnormal mitosis for apoptosis at later stages.
IT 872573-93-8, R03306
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CDK1 inhibitors antagonize the immediate apoptosis triggered by spindle disruption but promote apoptosis following the subsequent rereplication and abnormal mitosis)
RN 872573-93-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

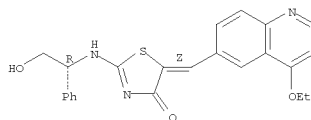
L4 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

L4 ANSWER 10 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1116484 CAPLUS
DOCUMENT NUMBER: 147:420045
TITLE: Tumor models employing green fluorescent protein
INVENTOR(S): Qing, Weiguo
PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
SOURCE: Eur. Pat. Appl., 69pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| EP 1840570 | A1 | 20071003 | EP 2007-104650 | 20070322 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | | |
| EP 2037270 | A2 | 20090318 | EP 2008-170178 | 20070322 |
| EP 2037270 | A3 | 20090325 | | |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| US 20070231789 | A1 | 20071004 | US 2007-728403 | 20070326 |
| US 7749486 | B2 | 20100706 | | |
| CA 2582236 | A1 | 20070930 | CA 2007-2582236 | 20070327 |
| JP 2007275060 | A | 20071025 | JP 2007-94652 | 20070330 |
| SG 136110 | A1 | 20071029 | SG 2007-2390 | 20070330 |
| CN 101046471 | A | 20071003 | CN 2007-10092159 | 20070402 |
| PRIORITY APPLN. INFO.: | | | US 2006-788250P | P 20060331 |
| | | | EP 2007-104650 | A3 20070322 |

AB The present invention provides a method of evaluating whether a tumor metastasizes which comprises injecting GFP (green fluorescent protein)-expressing tumor cells into an athymic mouse, such as a nude or SCID mouse, followed by sacrificing the mouse and removing one or more tissues to be evaluated. The removed tissue is homogenized, and the level of GFP in the homogenized sample quantified using laser-scanning fluoroscopy. Preferred GFP-expressing tumor cells are LOX-GFP cells. More preferably, GFP-expressing tumor cells are LOX-GFP-LM cells. The present invention also provides a method for evaluating a candidate drug or protocol for the inhibition of metastasis of a tumor which comprises injecting an athymic mouse with GFP-expressing tumor cells and administering a candidate drug or protocol to the mouse.
IT 879323-76-9
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor models employing green fluorescent protein (GFP) to determination metastasis and evaluate drug candidates)
RN 879323-76-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[(4-ethoxy-6-quinolinyl)methylene]-2-[[(1R)-2-hydroxy-1-phenylethyl]amino]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

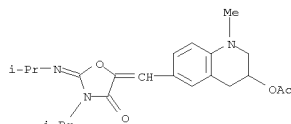


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1089317 CAPLUS
DOCUMENT NUMBER: 147:395222
TITLE: Fabrication of lithographic printing plate
INVENTOR(S): Ishij4, Yohei
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 61pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

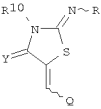
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-------------------|------------|
| JP 2007249153 | A | 20070927 | JP 2006-123822 | 20060427 |
| PRIORITY APPLN. INFO.: | | | JP 2006-36836 | A 20060214 |
| OTHER SOURCE(S): | | | MARPAT 147:395222 | |

AB The fabrication method involves (1) irradiating 350-450 nm-wavelength laser to a plate master having a hydrophilic support, a photosensitive layer containing (A) sensitizing dyes having absorption in 350-450 nm-wavelength region and solubility to a pH 4.5-aqueous solution at 25 ° ±100 mg/L, (B) initiators, (C) polymerizable compds., and (D) hydrophobic polymer binders having acid value ≤0.3 meq/g, and a protection layer in this order and (2) scrubbing the plate surface with an automatic processor in the presence of a developing solution at pH 2-10 to remove the protection layer and the photosensitive layer in nonexposed parts. The printing plate fabricated as above is also claimed. The plate master with high sensitivity to the above laser and storage stability is processed to give the printing plate in good workability, developability, low environmental load, etc.
IT 950692-97-4
RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(sensitizing dyes, photosensitive layer containing; fabrication of lithog. printing plate by laser irradiation and scrubbing)
RN 950692-97-4 CAPLUS
CN 4-Oxazolidinone, 5-[[3-(acetyloxy)-1,2,3,4-tetrahydro-1-methyl-6-quinolinyl]methylene]-3-(1-methylethyl)-2-[[(1-methylethyl)imino]- (CA INDEX NAME)



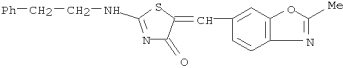
L4 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1022578 CAPLUS
DOCUMENT NUMBER: 147:365484
TITLE: Preparation of thiazolones for use as PI3 kinase inhibitors
INVENTOR(S): Dhanak, Dashyant; Knight, Steven David
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007103755 | A2 | 20070913 | WO 2007-US63113 | 20070302 |
| WO 2007103755 | A3 | 20080306 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| EP 1993536 | A2 | 20081126 | EP 2007-757756 | 20070302 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | | |
| JP 2009528384 | T | 20090806 | JP 2008-557506 | 20070302 |
| US 20090048252 | A1 | 20090219 | US 2008-281181 | 20080829 |
| PRIORITY APPLN. INFO.: | | | | |
| US 2006-778272P P 20060302 | | | | |
| WO 2007-US63113 W 20070302 | | | | |
| ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT | | | | |
| OTHER SOURCE(S): MARPAT 147:365484 | | | | |
| GI | | | | |

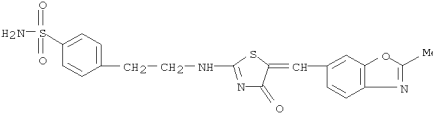


AB The title compds. I [R = H, (un)substituted aryl, cycloalkyl, alkyl; R10 = H, alkyl, (CH2)mOH, (CH2)mCO2H; m = 0-6; Y = O, S, NR11; R11 = H, alkyl, (CH2)pOH, (CH2)pCO2H; p = 0-6; Q = (un)substituted benzoxazolyl, benzimidazolyl, etc.], useful for inhibiting the activity/function of PI3 kinases, were prepared and formulated. E.g., a multi-step synthesis of (5Z)-2-[(2-chlorophenyl)amino]-5-[(1-methyl-1H-benzimidazol-6-yl)methylidene]-1,3-thiazol-4(5H)-one, starting from 3-methoxy-4-nitrobenzoic acid, was given. Also invented is a method of treating one or more disease states selected from: autoimmune disorders, inflammatory diseases, cardiovascular diseases, neurodegenerative diseases, allergy, asthma, pancreatitis, multiorgan failure, kidney diseases, platelet aggregation, cancer, sperm motility, transplantation

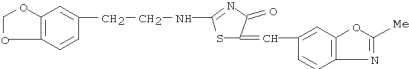
L4 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



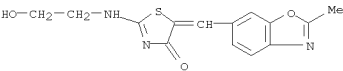
RN 864274-26-0 CAPLUS
CN Benzenesulfonamide, 4-[2-[[[4,5-dihydro-5-[(2-methyl-6-benzoxazolyl)methylene]-4-oxo-2-thiazolyl]amino]ethyl]- (CA INDEX NAME)



RN 864274-27-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-[(1,3-benzodioxol-5-yl)ethyl]amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)

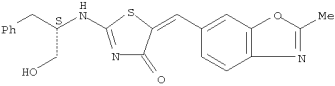


RN 864274-31-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[(2-hydroxyethyl)amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)



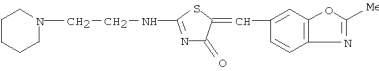
RN 864274-32-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1S)-1-(hydroxymethyl)-2-phenylethyl]amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

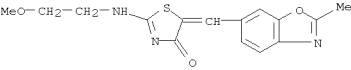


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

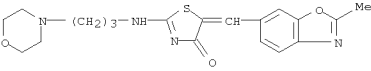
L4 ANSWER 12 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
rejection, graft rejection and lung injuries by the administration of substituted thiazolones I.
IT 864274-17-9P 864274-20-4P 864274-21-5P
864274-23-7P 864274-25-9P 864274-26-0P
864274-27-1P 864274-31-7P 864274-32-8P
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted thiazolones as PI3 kinase inhibitors useful in combination therapy of diseases)
RN 864274-17-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-methyl-6-benzoxazolyl)methylene]-2-[[[2-(1-piperidinyl)ethyl]amino]- (CA INDEX NAME)



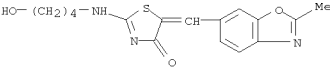
RN 864274-20-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[(2-methoxyethyl)amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)



RN 864274-21-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-methyl-6-benzoxazolyl)methylene]-2-[[[3-(4-morpholinyl)propyl]amino]- (CA INDEX NAME)



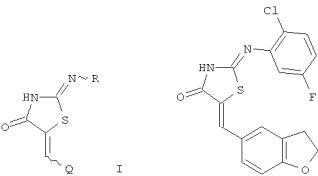
RN 864274-23-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[(4-hydroxybutyl)amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)



RN 864274-25-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-methyl-6-benzoxazolyl)methylene]-2-[(2-phenylethyl)amino]- (CA INDEX NAME)

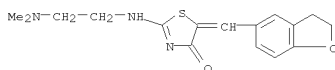
L4 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:1022549 CAPLUS
DOCUMENT NUMBER: 147:365483
TITLE: Preparation of thiazolones for use as PI3 kinase inhibitors
INVENTOR(S): Dhanak, Dashyant; Knight, Steven David
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 132 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2007103754 | A2 | 20070913 | WO 2007-US63112 | 20070302 |
| WO 2007103754 | A3 | 20080306 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA | | | | |
| EP 1993535 | A2 | 20081126 | EP 2007-757755 | 20070302 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | | |
| JP 2009528383 | T | 20090806 | JP 2008-557505 | 20070302 |
| US 20090023742 | A1 | 20090122 | US 2008-281179 | 20080829 |
| PRIORITY APPLN. INFO.: | | | | |
| US 2006-778428P P 20060302 | | | | |
| WO 2007-US63112 W 20070302 | | | | |
| ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT | | | | |
| OTHER SOURCE(S): CASREACT 147:365483; MARPAT 147:365483 | | | | |
| GI | | | | |

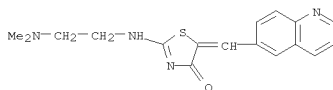


AB The title compds. I [R = cycloalkyl, naphthyl, (un)substituted Ph, etc.; Q = benzofuranyl, quinolinyl, Ph, etc.], useful for inhibiting the activity/function of PI3 kinases, were prepared E.g., a multi-step synthesis of II, starting 2-chloro-5-fluoroaniline, was given. Also invented is a method of treating one or more disease states selected from: autoimmune disorders, inflammatory diseases, cardiovascular diseases, neurodegenerative diseases, allergy, asthma, pancreatitis, multiorgan failure, kidney diseases, platelet aggregation, cancer, sperm motility,

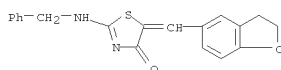
L4 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
transplantation rejection, graft rejection and lung injuries by the
administration of substituted thiazolones I.
IT 701293-74-5P 701293-76-7P 701293-78-9P
701293-80-3P 701293-81-4P 701293-82-5P
701294-17-9P 701294-18-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of thiazolone compds. as PI3 kinase inhibitors useful in
combination therapy of diseases)
RN 701293-74-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[[2-
(dimethylamino)ethyl]amino]- (CA INDEX NAME)



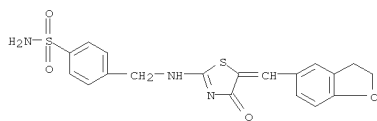
RN 701293-76-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(dimethylamino)ethyl]amino]-5-(6-
quinolinylmethylene)- (CA INDEX NAME)



RN 701293-78-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-
[(phenylmethyl)amino]- (CA INDEX NAME)

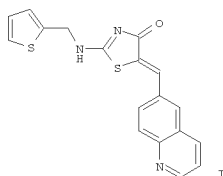


RN 701293-80-3 CAPLUS
CN Benzenesulfonamide, 4-[[[5-[(2,3-dihydro-5-benzofuranyl)methylene]-4,5-
dihydro-4-oxo-2-thiazolyl]amino]methyl]- (CA INDEX NAME)



RN 701293-81-4 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[[3-
(dimethylamino)propyl]amino]- (CA INDEX NAME)

L4 ANSWER 14 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:382117 CAPLUS
DOCUMENT NUMBER: 147:52839
TITLE: Synthesis and activity of
quinolinyl-methylene-thiazolinones as potent and
selective cyclin-dependent kinase 1 inhibitors
AUTHOR(S): Chen, Shaoqing; Chen, Li; Le, Nam T.; Zhao, Chunlin;
Sidduri, Achyutharao; Lou, Jian Ping; Michoud,
Christophe; Portland, Louis; Jackson, Nicole; Liu,
Jin-Jun; Konzelmann, Fred; Chi, Feng; Tovar,
Christian; Xiang, Qing; Chen, Yingsi; Wen, Yang;
Vassilev, Lyubomir T.
CORPORATE SOURCE: Roche Research Center, Hoffmann-La Roche Inc., Nutley,
NJ, 07110, USA
SOURCE: Bioorganic & Medicinal
Chemistry Letters (2007),
17(8), 2134-2138
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:52839
GI



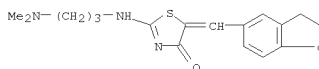
AB A novel series of quinolinyl-methylene-thiazolinones, e.g., I, has been
identified as potent and selective cyclin-dependent kinase 1 (CDK1)
inhibitors. Their synthesis and structure activity relationships (SAR)
are described. Representative compds. from this class reversibly inhibit
CDK1 activity in vitro, and block cell cycle progression in human tumor
cell lines, suggesting a potential use as antitumor agents.

IT 872573-93-8P 872573-97-2P 872574-03-3P
872574-04-4P 872574-05-5P 872574-06-6P
872574-09-9P 872574-11-3P 872574-14-6P
872574-21-5P 872574-22-6P 872574-27-1P
872574-37-3P 872574-56-6P 872574-59-9P
872574-65-7P 938047-10-0P 938047-14-4P
938047-15-5P 938047-16-6P 938047-18-8P
938047-20-2P 938047-21-3P 938047-22-4P
938047-23-5P 938047-24-6P 938047-25-7P
938047-26-8P 938047-27-9P 938047-28-0P
938047-29-1P 938047-31-5P 938047-34-8P
938047-46-2P

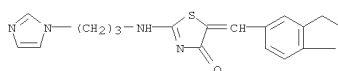
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
(Biological study); PREP (Preparation)
(preparation, cyclin-dependent kinase 1 inhibitory activity, antitumor
activity, and SAR of (quinolinylmethylidene)thiazolinones)
RN 872573-93-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-,
(5Z)- (CA INDEX NAME)

Double bond geometry as shown.

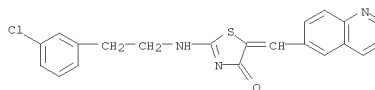
L4 ANSWER 13 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



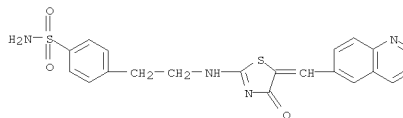
RN 701293-82-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[[3-(1H-
imidazol-1-yl)propyl]amino]- (CA INDEX NAME)



RN 701294-17-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-chlorophenyl)ethyl]amino]-5-(6-
quinolinylmethylene)- (CA INDEX NAME)

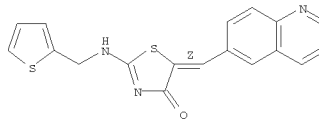


RN 701294-18-0 CAPLUS
CN Benzenesulfonamide, 4-[2-[[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-
thiazolyl]amino]ethyl]- (CA INDEX NAME)



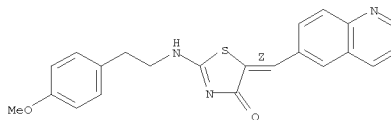
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L4 ANSWER 14 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



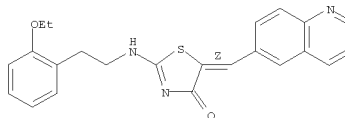
RN 872573-97-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(4-methoxyphenyl)ethyl]amino]-5-(6-
quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



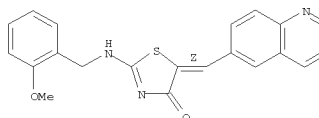
RN 872574-03-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(2-ethoxyphenyl)ethyl]amino]-5-(6-
quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



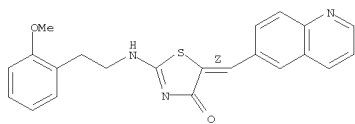
RN 872574-04-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(2-methoxyphenyl)methyl]amino]-5-(6-
quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



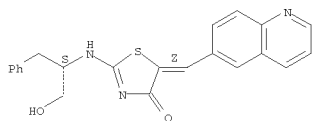
RN 872574-05-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(2-methoxyphenyl)ethyl]amino]-5-(6-
quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



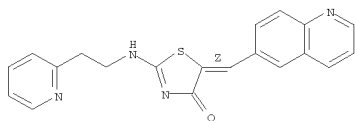
RN 872574-06-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1S)-1-(hydroxymethyl)-2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



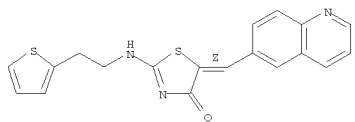
RN 872574-09-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(2-pyridinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



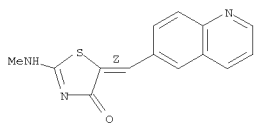
RN 872574-11-3 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[[2-(2-thienyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



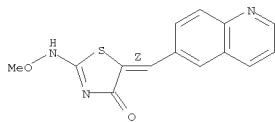
RN 872574-14-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1R)-1-(hydroxymethyl)-2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



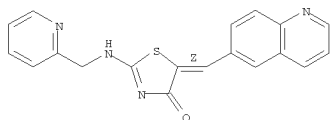
RN 872574-56-6 CAPLUS
CN 4(5H)-Thiazolone, 2-(methoxyamino)-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



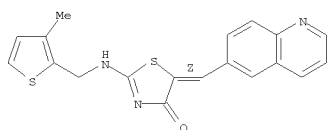
RN 872574-59-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(2-pyridinylmethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



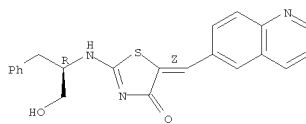
RN 872574-65-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(3-methyl-2-thienyl)methyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



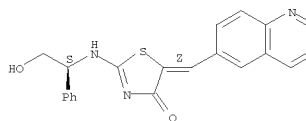
RN 938047-10-0 CAPLUS
CN 4(5H)-Thiazolone, 2-(butylamino)-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



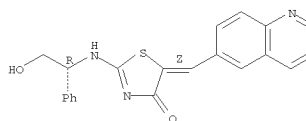
RN 872574-21-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1S)-2-hydroxy-1-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



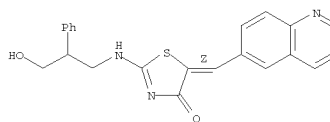
RN 872574-22-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



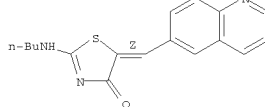
RN 872574-27-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[3-hydroxy-2-phenylpropyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



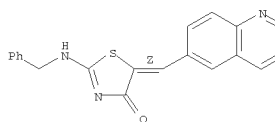
RN 872574-37-3 CAPLUS
CN 4(5H)-Thiazolone, 2-(methylamino)-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



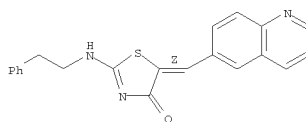
RN 938047-14-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[phenylmethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



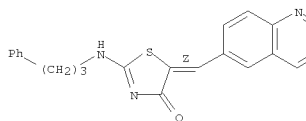
RN 938047-15-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



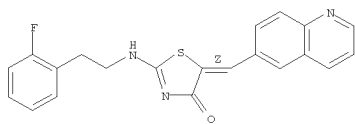
RN 938047-16-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[3-phenylpropyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



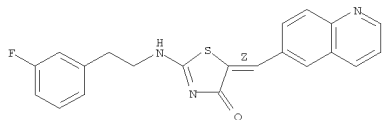
RN 938047-18-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(2-fluorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



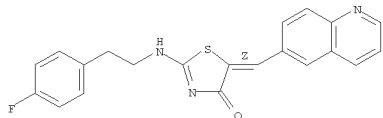
RN 938047-20-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-fluorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



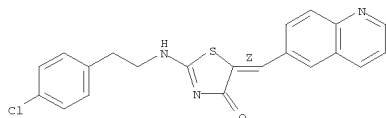
RN 938047-21-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-fluorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



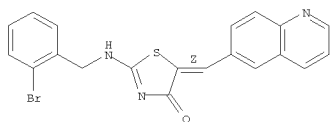
RN 938047-22-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-chlorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



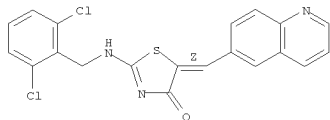
RN 938047-23-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-bromophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



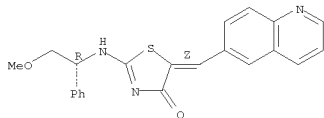
RN 938047-28-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-bromophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



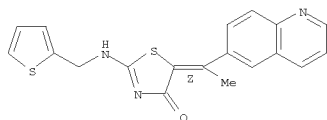
RN 938047-29-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2,6-dichlorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



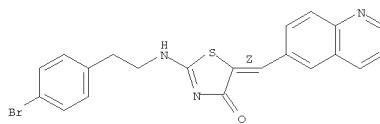
RN 938047-31-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[1-(6-quinolinyl)ethylidene]-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



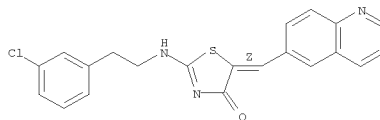
RN 938047-34-8 CAPLUS
CN 4(5H)-Oxazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



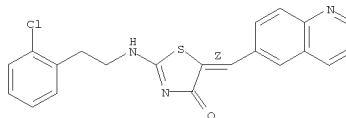
RN 938047-24-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-chlorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



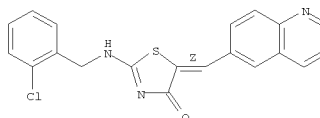
RN 938047-25-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-chlorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



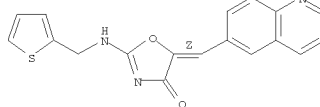
RN 938047-26-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-chlorophenyl)methyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

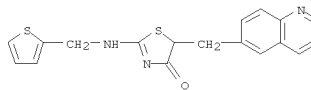


RN 938047-27-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-bromophenyl)methyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 938047-46-2 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]- (CA INDEX NAME)

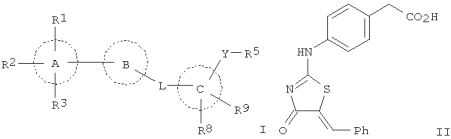


OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:330181 CAPLUS
DOCUMENT NUMBER: 146:358833
TITLE: Preparation of thiazolinone and oxazolinone derivatives as PTP-1B inhibitors
INVENTOR(S): Banerjee, Rakesh Kumar; Gupta, Ramesh Chandra; Tuli, Davinder; Rode, Milind; Shuthar, Bharat; Umrani, Dhananjay; Pathak, Padmaja; Choksi, Tejal; Chaudhary, Anita
PATENT ASSIGNEE(S): Torrent Pharmaceuticals Ltd., India
SOURCE: PCT Int. Appl., 110pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|----------|
| WO 2007032028 | A1 | 20070322 | WO 2006-IN368 | 20060915 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| IN 2005K000860 | A | 20090619 | IN 2005-K0860 | 20050916 |
| AU 2006290250 | A1 | 20070322 | AU 2006-290250 | 20060915 |
| CA 2622518 | A1 | 20070322 | CA 2006-2622518 | 20060915 |
| EP 1934192 | A1 | 20080625 | EP 2006-796203 | 20060915 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS | | | | |
| JP 2009508848 | T | 20090305 | JP 2008-530756 | 20060915 |
| ZA 2008000278 | A | 20090826 | ZA 2008-2078 | 20080305 |
| CN 101268060 | A | 20080917 | CN 2006-80034134 | 20080317 |
| MX 2008003783 | A | 20080507 | MX 2008-3783 | 20080318 |
| KR 2008056730 | A | 20080623 | KR 2008-7009160 | 20080416 |
| US 20090088432 | A1 | 20090402 | US 2008-992016 | 20080813 |
| PRIORITY APPLN. INFO.: IN 2005-K0860 A 20050916 WO 2006-IN368 W 20060915 | | | | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 146:358833; MARPAT 146:358833
GI



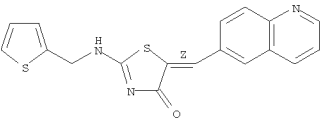
AB The title thiazolinone and oxazolinone derivs. I [wherein ring A = naphthalene, biphenyl, etc.; ring B = (un)substituted

L4 ANSWER 16 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:178211 CAPLUS
DOCUMENT NUMBER: 146:225243
TITLE: Cell cycle synchronization at the G2/M phase border by reversible inhibition of CDK1
AUTHOR(S): Vassilev, Lyubomir T.
CORPORATE SOURCE: Discovery Oncology; Roche Research Center, Hoffmann-La Roche Inc, Nutley, NJ, 07110, USA
SOURCE: Cell Cycle (2006), 5(22), 2555-2556
CODEN: OCEYAS; ISSN: 1538-4101
PUBLISHER: Landes Bioscience
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. Chemical agents for cell cycle synchronization have greatly facilitated the study of biochem. events driving cell cycle progression. G1, S, and M phase inhibitors have been developed and used widely in cell cycle research. However, currently there are no effective G2 phase inhibitors and synchronization of cultured cells in G2 phase has been challenging. Recently, a selective CDK1 inhibitor, RO-3306, has been identified that reversibly arrests proliferating human cells at the G2/M phase border and provides a novel means for cell cycle synchronization. A single-step protocol using RO-3306 permits the synchronization of >95% of cycling cancer cells in G2 phase. RO-3306 arrested cells enter mitosis rapidly after release from the G2 block thus allowing for isolation of mitotic cells without microtubule poisons. RO-3306 represents a new mol. tool for studying CDK1 function in human cells.

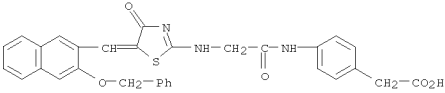
IT 872573-93-8, RO-3306
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(cell cycle synchronization at the G2/M phase border by reversible inhibition of CDK1)
RN 872573-93-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

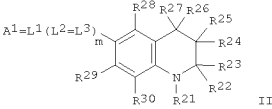
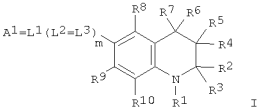
L4 ANSWER 15 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
(thiazolinone)methylene, (oxazolinone)methylene, etc.; ring C = benzene, naphthalene, etc.; L = NH, NHCH2, etc.; Y = (un)substituted CH2, CH2CH2, or CH2CH2CH2; R1 = H, -CH2CO2H, etc.; R2 and R3 = independently H, -CH2CO2H, etc.; R5 = COCO2H, (un)substituted CO2H, etc.; R8 and R9 = independently H, halo, alkyl, etc.] or pharmaceutically acceptable salts or prodrugs thereof are prepd. as protein tyrosine phosphatase (PTP) inhibitors for treating or preventing PTP-1B mediated diseases. For example, the compd. II was prepd. in a multi-step synthesis. Some of the compds. I showed good inhibitory activities against human PTP-1B.
IT 929701-41-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of thiazolinone and oxazolinone derivs. as PTP-1B inhibitors)
RN 929701-41-7 CAPLUS
CN Benzeneacetic acid, 4-[[2-[[[4,5-dihydro-4-oxo-5-[[3-(phenylmethoxy)-2-naphthalenyl]methylene]-2-thiazolyl]amino]acetyl]amino]- (CA INDEX NAME)



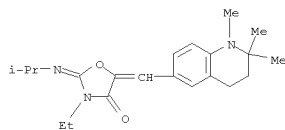
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2007:116304 CAPLUS
DOCUMENT NUMBER: 146:216421
TITLE: Photosensitive composition with improved short wavelength sensitivity containing sensitizing dye
INVENTOR(S): Hanaki, Naoyuki
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 74pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| JP 2007025059 | A | 20070201 | JP 2005-204537 | 20050713 |
| PRIORITY APPLN. INFO.: JP 2005-204537 20050713 | | | | |
| OTHER SOURCE(S): MARPAT 146:216421 | | | | |
| GI | | | | |

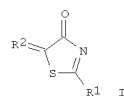


AB Disclosed is a photosensitive composition comprising (a) ≥ 1 sensitizing dye represented by I or II (R1,21 = alkyl, aryl, heterocyclyl; R2-10, R22-30 = H, monovalent substituent; L1-3, L21,22 = methine; A1,21 = aromatic, heterocyclyl; and m, n = integer ≥ 0), (b) an initiator capable of generating an acid, a base, or a radical, and (c) a compound which changes its chemical or phys. characteristic irreversibly upon an interaction with an acid, a base, or a radical. The photosensitive composition is used for a CTP system.
IT 922509-76-0
RL: TEM (Technical or engineered material use); USES (Uses)
(Photosensitive composition with improved short wavelength sensitivity containing sensitizing dye)
RN 922509-76-0 CAPLUS
CN 4-Oxazolidinone, 3-ethyl-2-[(1-methylethyl)imino]-5-[(1,2,3,4-tetrahydro-1,2,2-trimethyl-6-quinolinyl)methylene]- (CA INDEX NAME)



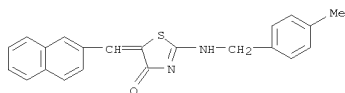
L4 ANSWER 18 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2006:1225881 CAPLUS
 DOCUMENT NUMBER: 146:7948
 TITLE: Preparation of 2,5-disubstituted thiazol-4-ones as vanilloid receptor VR1 ligands.
 INVENTOR(S): Frank, Robert; Kless, Achim; Jostock, Ruth
 PATENT ASSIGNEE(S): Gruenenthal G.m.b.H., Germany
 SOURCE: PCT Int. Appl., 153pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------------|------------|
| WO 2006122777 | A2 | 20061123 | WO 2006-EP4666 | 20060517 |
| WO 2006122777 | A3 | 20070222 | | |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| DE 102005024012 | A1 | 20061123 | DE 2005-102005024012 | 20050520 |
| CA 2609002 | A1 | 20061123 | CA 2006-2609002 | 20060517 |
| EP 1890695 | A2 | 20080227 | EP 2006-753682 | 20060517 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | |
| JP 2008540595 | T | 20081120 | JP 2008-511622 | 20060517 |
| US 2009021578 | A1 | 20090827 | US 2008-915156 | 20080610 |
| PRIORITY APPLN. INFO.: | | | DE 2005-102005024012A | 20050520 |
| | | | WO 2006-EP4666 | W 20060517 |
| ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT | | | | |
| OTHER SOURCE(S): | CASREACT 146:7948; MARPAT 146:7948 | | | |
| GI | | | | |

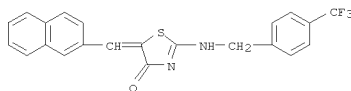


AB Title compds. [I; R1 = (substituted) (unsatd.) (heteroatom-containing) (condensed) cycloaliphaticyl, aryl, amino, acylamino, ureido; R2 = (substituted) (unsatd.) (heteroatom-containing) (condensed) cycloaliphaticyl, CHUX, etc.; U = O, S, NH, NMe, NEt, NCHMe2; X = (substituted) (fused) aryl, heteroaryl], were prepared. Thus, 4-hydroxy-3-methoxybenzonitrile, thioglycolic acid, and Et3N were kept in EtOH to give 3%. 2-(4-hydroxy-3-methoxyphenyl)thiazol-4-one. The latter was refluxed overnight with 4-methylbenzaldehyde and NaOAc in HOAc to give 74%. 2-(4-hydroxy-3-methoxyphenyl)-5-(4-methylbenzylidene)thiazolin-4-one. Tested I showed EC50 values for affinity to human VR1 receptors of 1.02 to >25.

L4 ANSWER 18 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
 IT 915312-09-3 915312-20-8
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (preparation of thiazolones as vanilloid receptor VR1 ligands)
 RN 915312-09-3 CAPLUS
 CN 4(5H)-Thiazolone, 2-[[4-methylphenyl)methyl]amino]-5-(2-naphthalenylmethylene)- (CA INDEX NAME)



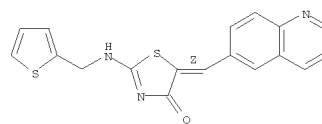
RN 915312-20-8 CAPLUS
 CN 4(5H)-Thiazolone, 5-(2-naphthalenylmethylene)-2-[[4-(trifluoromethyl)phenyl)methyl]amino]- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2006:711520 CAPLUS
 DOCUMENT NUMBER: 145:327880
 TITLE: Selective small-molecule inhibitor reveals critical mitotic functions of human CDK1
 AUTHOR(S): Vassilev, Lyubomir T.; Tovar, Christian; Chen, Shaoqing; Knezevic, Dejan; Zhao, Xiaolan; Sun, Hongmao; Heimbrosch, David C.; Chen, Li
 CORPORATE SOURCE: Department of Discovery Oncology, Roche Research Center, Hoffmann-La Roche, Inc., Nutley, NJ, 07110, USA
 SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2006), 103(28), 10660-10665
 CODEN: PNASA6; ISSN: 0027-8424
 NATIONAL ACADEMY OF SCIENCES
 PUBLISHER: Journal
 DOCUMENT TYPE: English
 LANGUAGE: English
 AB CDK1 is a nonredundant cyclin-dependent kinase (CDK) with an essential role in mitosis, but its multiple functions still are poorly understood at a mol. level. Here we identify a selective small-mol. inhibitor of CDK1 that reversibly arrests human cells at the G2/M border of the cell cycle and allows for effective cell synchronization in early mitosis. Inhibition of CDK1 during cell division revealed that its activity is necessary and sufficient for maintaining the mitotic state of the cells, preventing replication origin licensing and premature cytokinesis. Although CDK1 inhibition for up to 24 h is well tolerated, longer exposure to the inhibitor induces apoptosis in tumor cells, suggesting that selective CDK1 inhibitors may have utility in cancer therapy.
 IT 872573-93-8, Ro 3306
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (selective small-mol. inhibitor reveals critical mitotic functions of human CDK1)
 RN 872573-93-8 CAPLUS
 CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 76 THERE ARE 76 CAPLUS RECORDS THAT CITE THIS RECORD (76 CITINGS)
 REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4ANSWER 20 OF 48CAPLUSCOPYRIGHT 2011 ACS on STN(Continued)

ACCESSION NUMBER:2006:633542CAPLUS

DOCUMENT NUMBER:145:93024

TITLE:Photosensitive composition containing sensitizing dye

INVENTOR(S):Ishiji, Yohei; Shibuya, Akinori

PATENT ASSIGNEE(S):Fuji Photo Film Co., Ltd., Japan

SOURCE:Jpn. Kokai Tokkyo Koho, 56 pp.
CODEN: JKXXAF

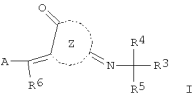
DOCUMENT TYPE:Patent

LANGUAGE:Japanese

FAMILY ACC. NUM. COUNT:1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------------------|----------|-----------------|------------|
| JP 2006171689 | A | 20060629 | JP 2005-219199 | 20050728 |
| PRIORITY APPLN. INFO.: | | | JP 2004-331763 | A 20041116 |
| OTHER SOURCE(S): | MARPAT 145:93024 | | | |
| GI | | | | |

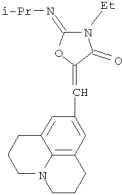


AB The composition contains (A) a sensitizing dye I (A = an aromatic ring or a hetero ring having a substituent; R3 = H or monovalent nonmetallic group; R4 and R5 = monovalent nonmetallic group; R6 = H or a monovalent nonmetallic group; A, R3, R4, R5, and/or R6 are bonded to form alicyclic or aromatic ring; Z = 5- or 6-membered heterocycle), (B) an initiator generating a radical, an acid, or a base, and (C) a polymerizing compound. The composition, especially suitable for scanning lithog. printing plates, provides high sensitivity to short-wavelength semiconductor laser.

IT 886984-65-2
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(dye; photosensitive composition containing IR-absorbing dye for scanning lithog. printing plate)

RN 886984-65-2 CAPLUS

CN 4-Oxazolidinone, 3-ethyl-2-[(1-methylethyl)imino]-5-[(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylene]- (CA INDEX NAME)



L4ANSWER 21 OF 48CAPLUSCOPYRIGHT 2011 ACS on STN(Continued)

ACCESSION NUMBER:2006:465092CAPLUS

DOCUMENT NUMBER:144:490394

TITLE:Radiation curable ink-jet inks containing polymerizing initiation sensitizing dyes

INVENTOR(S):Tsuchimura, Tomotaka; Kunita, Kazuto

PATENT ASSIGNEE(S):Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation

SOURCE:Eur. Pat. Appl., 205 pp.
CODEN: EPXXDW

DOCUMENT TYPE:Patent

LANGUAGE:English

FAMILY ACC. NUM. COUNT:1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| EP 1657286 | A2 | 20060517 | EP 2005-24674 | 20051111 |
| EP 1657286 | A3 | 20081217 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU | | | | |
| JP 2006137876 | A | 20060601 | JP 2004-329435 | 20041112 |
| JP 2006249154 | A | 20060921 | JP 2005-64636 | 20050308 |
| JP 4619832 | B2 | 20110126 | | |
| JP 2006249155 | A | 20060921 | JP 2005-64637 | 20050308 |
| JP 4619833 | B2 | 20110126 | | |
| US 20060128823 | A1 | 20060615 | US 2005-272367 | 20051114 |
| PRIORITY APPLN. INFO.: | | | JP 2004-329435 | A 20041112 |
| | | | JP 2005-64636 | A 20050308 |
| | | | JP 2005-64637 | A 20050308 |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

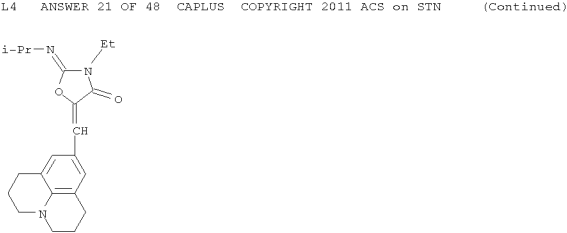
OTHER SOURCE(S): MARPAT 144:490394

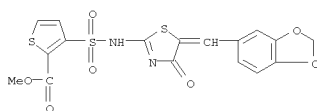
AB The invention relates to an ink-jet printing ink having high sensitivity to radiation (UV), excellent storage stability, and ability to form high quality image, as well as to a method for producing a planog. printing plate, which does not require development processing and has high printing durability. The radiation-curable ink-jet printing ink comprises a colorant, a polymerizable compound, and a polymerization initiation system comprising a polymerization initiator and a sensitizing dye selected from specific compds. The method for producing a planog. printing plate comprises the steps of ejecting the ink onto a hydrophilic support to obtain a hydrophobic image, and irradiating the ink on the support. Thus, a yellow ink having a curing sensitivity of 100 mJ/cm2 was produced by mixing a yellow pigment dispersion (20), stearyl acrylate (60), 2-hydroxyethyl acrylate-terminated bisphenol A diisocyanate-1,6-hexanediol copolymer having a mol. weight of 1,500 (10), pentaerythritol triacrylate-terminated 1,4-butanediol-hexamethylene diisocyanate copolymer having a mol. weight of 1,500 (5), 5-[[4-(diphenylamino)phenyl]methylene]-3-(2-phenylethyl)-2,4-oxazolidinedione as a sensitizing dye (1), and bis(cyclopentadienyl)-bis[2,6-difluoro-3-(pyrrol-1-yl)-phenyl]titanium (CGI 784) as a polymerization initiator (4 parts), the pigment dispersion comprising C.I. Pigment Yellow 12 (10), a Solsperse-type dispersant (5), and stearyl acrylate (85 parts).

IT 886984-65-2
RL: CAT (Catalyst use); USES (Uses)
(sensitizing dye; UV-curable ink-jet inks containing polymerization initiation sensitizing dyes)

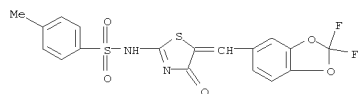
RN 886984-65-2 CAPLUS

CN 4-Oxazolidinone, 3-ethyl-2-[(1-methylethyl)imino]-5-[(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylene]- (CA INDEX NAME)

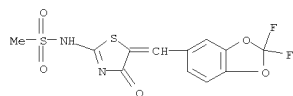




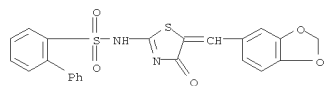
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CN Benzenesulfonamide, N-[5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-4-methyl- (CA INDEX NAME)



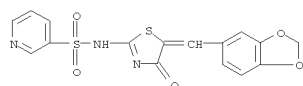
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CN Methanesulfonamide, N-[5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



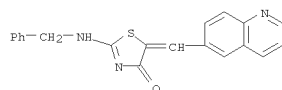
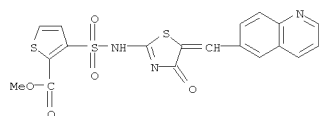
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CN [1,1'-Biphenyl]-2-sulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



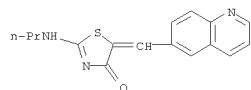
RN 843641-21-4 CAPLUS
CN 3-Pyridinesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



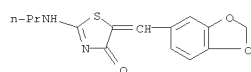
RN 843641-22-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]amino]sulfonyl]-, methyl ester (CA INDEX NAME)



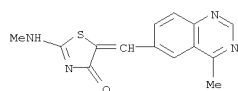
RN 843641-29-2 CAPLUS
CN 4(5H)-Thiazolone, 2-(propylamino)-5-(6-quinolinylmethylene)- (CA INDEX NAME)



RN 843641-30-5 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-(propylamino)- (CA INDEX NAME)

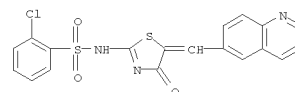


RN 843641-31-6 CAPLUS
CN 4(5H)-Thiazolone, 2-(methylamino)-5-[(4-methyl-6-quinazolinyl)methylene]- (CA INDEX NAME)

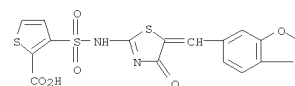


OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

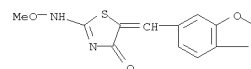
RN 843641-23-6 CAPLUS
CN Benzenesulfonamide, 2-chloro-N-[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]- (CA INDEX NAME)



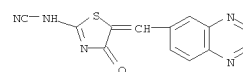
RN 843641-24-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]amino]sulfonyl]- (CA INDEX NAME)



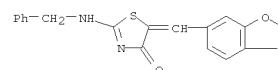
RN 843641-25-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-(methoxyamino)- (CA INDEX NAME)



RN 843641-26-9 CAPLUS
CN Cyanamide, [4,5-dihydro-4-oxo-5-(6-quinoxalinylmethylene)-2-thiazolyl]- (9CI) (CA INDEX NAME)



RN 843641-27-0 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(phenylmethyl)amino]- (CA INDEX NAME)

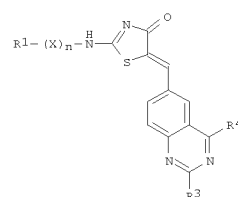


RN 843641-28-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[(phenylmethyl)amino]-5-(6-quinolinylmethylene)- (CA INDEX NAME)

ACCESSION NUMBER: 2006:362447 CAPLUS
DOCUMENT NUMBER: 144:412525
TITLE: Preparation of quinazolinylmethylene thiazolinones as CDK1 inhibitors
INVENTOR(S): Chen, Li; Chen, Shaoqing; Liu, Jin-Jun
PATENT ASSIGNTEE(S): F.Hoffmann-La Roche AG, Switz.
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|------------|
| WO 2006040050 | A1 | 20060420 | WO 2005-EP10703 | 20051005 |
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| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| AU 2005293832 | A1 | 20060420 | AU 2005-293832 | 20051005 |
| CA 2583311 | A1 | 20060420 | CA 2005-2583311 | 20051005 |
| US 20060084804 | A1 | 20060420 | US 2005-244028 | 20051005 |
| US 7501428 | B2 | 20090310 | | |
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| CN 101039939 | A | 20070919 | CN 2005-80034902 | 20051005 |
| CN 101039939 | B | 20100707 | | |
| JP 2008516904 | T | 20080522 | JP 2007-536045 | 20051005 |
| BR 2005018164 | A | 20081104 | BR 2005-18164 | 20051005 |
| RU 2405782 | C2 | 20101210 | RU 2007-117766 | 20051005 |
| MX 2007004274 | A | 20070516 | MX 2007-4274 | 20070411 |
| KR 2007053343 | A | 20070523 | KR 2007-7008501 | 20070413 |
| KR 890533 | B1 | 20090327 | | |
| IN 2007CN01498 | A | 20070831 | IN 2007-CN1498 | 20070413 |
| PRIORITY APPLN. INFO.: | | | US 2004-618612P | P 20041014 |
| | | | US 2005-681079P | P 20050513 |
| | | | WO 2005-EP10703 | W 20051005 |

OTHER SOURCE(S): CASREACT 144:412525; MARPAT 144:412525
GI



AB Title compds. represented by the formula I [wherein R1 = H, alkyl, (un)substituted (hetero)aryl or (hetero)cyclyl; X = (cyclo)alkylene; R3 = H, (alkyl)amino, -NHCO-alkyl; R4 = H, alkyl, -O(CH2CH2O)m-alkyl; m = 0 or 3; n = 0 or 1; with the proviso; and pharmaceutically acceptable salts thereof] were prepared as CDK1 (Cyclin-dependent kinase 1) inhibitors. For example, reaction of 2-methylsulfanyl-5-quinazolin-6-ylmethylenethiazol-4-one (preparation given) with thiophene methylamine gave I (R1Xn = 2-(thien-2-yl)ethyl, R3 = R4 = H), which showed CDK1/Cyclin B activity with R1 of 1.22 μ M. Thus, the title compds. and their pharmaceutical compns. are useful as CDK1 inhibitors for treatment of cancers (no data).

IT 883867-25-2P, (Z)-5-[[1-(Quinazolin-6-yl)methylidene]-2-[[2-(thiophen-2-yl)methyl]amino]thiazol-4-one 883867-29-6P, (Z)-2-[[2-(3-Fluorophenyl)ethyl]amino]-5-[1-(quinazolin-6-yl)methylidene]thiazol-4-one 883867-33-2P 883867-34-3P, (Z)-2-[(3-Fluorobenzyl)amino]-5-[1-(quinazolin-6-yl)methylidene]thiazol-4-one 883867-36-5P, (Z)-5-[1-(4-Ethoxyquinazolin-6-yl)methylidene]-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 883867-44-5P, 2-[[2-(2-Chlorobenzyl)amino]-5-[[4-ethoxy-2-(methylamino)quinazolin-6-yl)methylene]thiazol-4-one 883867-46-7P, 5-[[4-Ethoxy-2-(methylamino)quinazolin-6-yl)methylene]-2-[[2-(3-methylthien-2-yl)methyl]amino]thiazol-4-one 883867-47-8P, 2-[(3-Chloro-4-fluorobenzyl)amino]-5-[[4-ethoxy-2-(methylamino)quinazolin-6-yl)methylene]thiazol-4-one 883867-48-9P, 2-[(2-Chloro-4-fluorobenzyl)amino]-5-[[4-ethoxy-2-(methylamino)quinazolin-6-yl)methylene]thiazol-4-one 883867-49-0P, 2-[(2-Chloro-6-methylbenzyl)amino]-5-[[4-ethoxy-2-(methylamino)quinazolin-6-yl)methylene]thiazol-4-one 883867-50-3P, 5-[[4-Ethoxy-2-(methylamino)quinazolin-6-yl)methylene]-2-[(thiophen-2-yl)methyl]amino]thiazol-4-one 883867-51-4P, 5-[[4-Ethoxy-2-(methylamino)quinazolin-6-yl)methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 883867-57-0P, 2-[[2-(3-Fluorophenyl)ethyl]amino]-5-[1-(quinazolin-6-yl)methylidene]thiazol-4-one 883867-58-1P, 2-[(3-Fluorobenzyl)amino]-5-[1-(quinazolin-6-yl)methylidene]thiazol-4-one 883867-59-2P, 5-[1-(4-Ethoxyquinazolin-6-yl)methylidene]-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 883867-60-5P, 5-[1-(Quinazolin-6-yl)methylidene]-2-[(thiophen-2-yl)methyl]amino]thiazol-4-one 883867-62-7P, 2-[[1-(hydroxymethyl-2-phenylethyl)amino]-5-[1-(quinazolin-6-yl)methylidene]thiazol-4-one

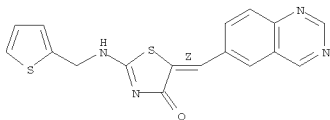
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of quinazolinylmethylene thiazolinones as CDK1 inhibitors for treatment of cancers)

RN 883867-25-2 CAPLUS

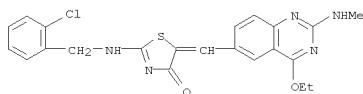
CN 4(5H)-Thiazolone, 5-(6-quinazolinylmethylene)-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



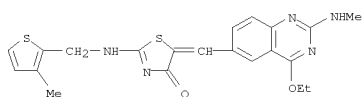
RN 883867-29-6 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(3-fluorophenyl)ethyl]amino]-5-(6-quinazolinylmethylene)-, (5Z)- (CA INDEX NAME)



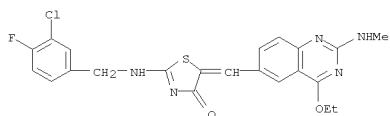
RN 883867-46-7 CAPLUS

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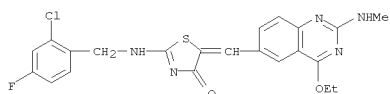
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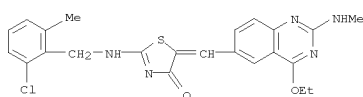
RN 883867-48-9 CAPLUS

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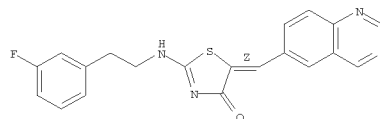


RN 883867-49-0 CAPLUS

CN 4(5H)-Thiazolone, 2-[[[(2-chloro-6-methylphenyl)methyl]amino]-5-[[4-ethoxy-2-(methylamino)-6-quinazolinyl]methylene]- (CA INDEX NAME)



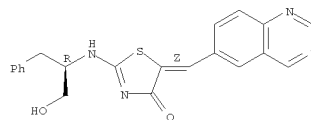
Double bond geometry as shown.



RN 883867-33-2 CAPLUS

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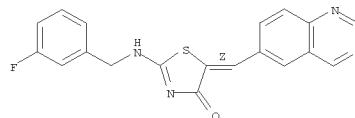
Absolute stereochemistry.
Double bond geometry as shown.



RN 883867-34-3 CAPLUS

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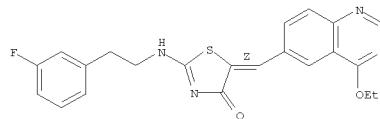
Double bond geometry as shown.



RN 883867-36-5 CAPLUS

CN 4(5H)-Thiazolone, 5-[[4-ethoxy-6-quinazolinyl]methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

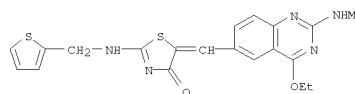


RN 883867-44-5 CAPLUS

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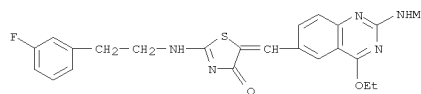
RN 883867-50-3 CAPLUS

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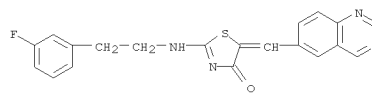
RN 883867-51-4 CAPLUS

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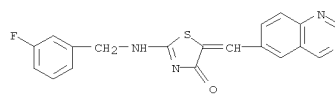
RN 883867-57-0 CAPLUS

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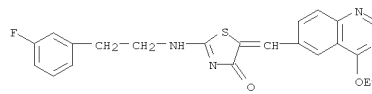
RN 883867-58-1 CAPLUS

CN 4(5H)-Thiazolone, 2-[[[(3-fluorophenyl)methyl]amino]-5-(6-quinazolinylmethylene)- (CA INDEX NAME)



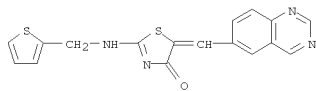
RN 883867-59-2 CAPLUS

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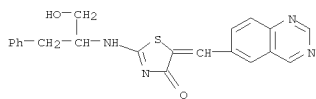


RN 883867-60-5 CAPLUS

L4 ANSWER 23 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
CN 4(5H)-Thiazolone, 5-[(6-quinazolinylmethylene)-2-[(2-thienylmethyl)amino]-
(CA INDEX NAME)]



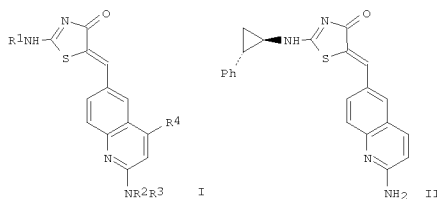
RN 883867-62-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(hydroxymethyl)-2-phenylethyl]amino]-5-(6-
quinazolinylmethylene)- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
ACCESSION NUMBER: 2006:273697 CAPLUS
DOCUMENT NUMBER: 144:331426
TITLE: Preparation of quinolinyl thiazolinones as CDK1
inhibitors for treatment of cancers
INVENTOR(S): Chen, Li; Chen, Shaoqing; Michoud, Christophe
PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
SOURCE: PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

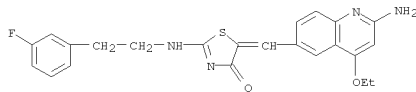
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|--|-------------|
| WO 2006029863 | A1 | 20060323 | WO 2005-EP9927 | 20050915 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, ST, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| US 20060063804 | A1 | 20060323 | US 2005-224175 | 20050912 |
| US 7241893 | B2 | 20070710 | | |
| AU 2005284294 | A1 | 20060323 | AU 2005-284294 | 20050915 |
| CA 2579348 | A1 | 20060323 | CA 2005-2579348 | 20050915 |
| EP 1791836 | A1 | 20070606 | EP 2005-788472 | 20050915 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | |
| CN 101018785 | A | 20070815 | CN 2005-80030902 | 20050915 |
| JP 2008513398 | T | 20080501 | JP 2007-531677 | 20050915 |
| BR 2005015451 | A | 20080729 | BR 2005-15451 | 20050915 |
| RU 2395509 | C2 | 20100727 | RU 2007-114126 | 20050915 |
| MX 2007002721 | A | 20070423 | MX 2007-2721 | 20070306 |
| KR 2007043886 | A | 20070425 | KR 2007-7005967 | 20070315 |
| KR 901091 | B1 | 20090608 | | |
| IN 2007CN01146 | A | 20070817 | IN 2007-CN1146 | 20070319 |
| KR 2009031797 | A | 20090327 | KR 2009-7004678 | 20090305 |
| PRIORITY APPLN. INFO.: | | | US 2004-610767P | P 20040917 |
| | | | WO 2005-EP9927 | W 20050915 |
| | | | KR 2007-7005967 | A3 20070315 |
| OTHER SOURCE(S): | | | CASREACT 144:331426; MARPAT 144:331426 | |
| GI | | | | |



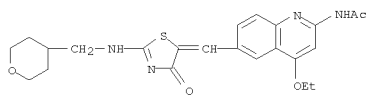
L4 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

AB Title compds. represented by the formula I [wherein R1 = H, (aryloxy)alkyl, arylalkylene, etc.; R2 = H; R3 = H, alkyl or carbonylalkyl; R4 = H, perfluoroalkyl(alkylene)oxy or aryl(alkylene); and pharmaceutically acceptable salts thereof] were prepared as CDK (Cyclin dependent kinase) inhibitors, especially CDK1 inhibitors. For example, II•CF3CO2H was provided in a multi-step synthesis starting from 3-ethoxyacryloyl chloride. I showed CDK1/Cyclin B activity with Ki of 0.001 - 5.00 μ M. Thus, I and their pharmaceutical compns., which have CDK1 antiproliferative activity, are useful for the treatment of cancers.
IT 880144-62-7P, 5-[(2-Amino-4-ethoxyquinolin-6-yl)methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 880144-68-3P, N-[4-Ethoxy-6-[[4-oxo-2-[(tetrahydropyran-4-yl)methyl]amino]-4H-thiazol-5-ylidene]methyl]quinolin-2-yl]acetamide 880144-71-8P, N-[4-Ethoxy-6-[[4-oxo-2-[[2-(tetrahydropyran-4-yl)methyl]amino]-4H-thiazol-5-ylidene]methyl]quinolin-2-yl]acetamide 880144-73-0P, N-[6-[[2-[(Cyclopropylmethyl)amino]-4-oxo-4H-thiazol-5-ylidene]methyl]-4-ethoxyquinolin-2-yl]acetamide 880144-75-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinolinyl thiazolinones as CDK1 inhibitors for treatment of cancers)

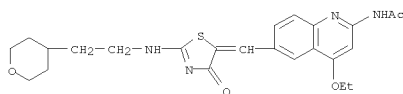
RN 880144-62-7 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-amino-4-ethoxy-6-quinolinyl)methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]- (CA INDEX NAME)



RN 880144-68-3 CAPLUS
CN Acetamide, N-[4-ethoxy-6-[[4-oxo-2-[(tetrahydro-2H-pyran-4-yl)methyl]amino]-5(4H)-thiazolylidene]methyl]-2-quinolinyl]- (CA INDEX NAME)

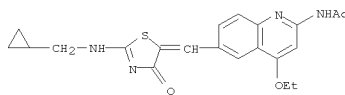


RN 880144-71-8 CAPLUS
CN Acetamide, N-[4-ethoxy-6-[[4-oxo-2-[[2-(tetrahydro-2H-pyran-4-yl)methyl]amino]-5(4H)-thiazolylidene]methyl]-2-quinolinyl]- (CA INDEX NAME)

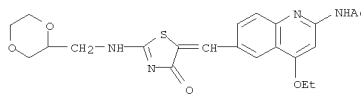


RN 880144-73-0 CAPLUS

L4 ANSWER 24 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
CN Acetamide, N-[6-[[2-[(cyclopropylmethyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-ethoxy-2-quinolinyl]- (CA INDEX NAME)



RN 880144-75-2 CAPLUS
CN Acetamide, N-[6-[[2-[(1,4-dioxan-2-ylmethyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-ethoxy-2-quinolinyl]- (CA INDEX NAME)

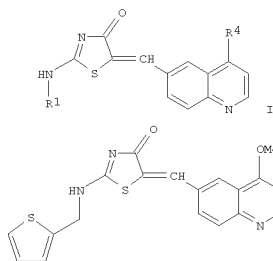


OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2006:273695 CAPLUS
DOCUMENT NUMBER: 144:312080
TITLE: Preparation of thiazolinone 4-monosubstituted quinolines as CDK1-Cyclin B inhibitors for use as anti-cancer agents
INVENTOR(S): Chen, Li; Chen, Shaoqing; Sidduri, Achyutharao; Lou, Jianping
PATENT ASSIGNEE(S): F. Hoffmann-La Roche AG, Switz.
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|----------|------------------|-------------|
| WO 2006029861 | A1 | 20060323 | WO 2005-EP9925 | 20050915 |
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| US 20060063805 | A1 | 20060323 | US 2005-214153 | 20050829 |
| US 7253285 | B2 | 20070807 | | |
| AU 2005284292 | A1 | 20060323 | AU 2005-284292 | 20050915 |
| CA 2579476 | A1 | 20060323 | CA 2005-2579476 | 20050915 |
| EP 1797085 | A1 | 20070620 | EP 2005-787266 | 20050915 |
| R: | AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | |
| CN 101023080 | A | 20070822 | CN 2005-80031330 | 20050915 |
| JP 2008513396 | T | 20080501 | JP 2007-531675 | 20050915 |
| BR 2005015467 | A | 20080722 | BR 2005-15467 | 20050915 |
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| MX 2007002914 | A | 20070427 | MX 2007-2914 | 20070309 |
| KR 2007043890 | A | 20070425 | KR 2007-7006017 | 20070315 |
| KR 899533 | B1 | 20090520 | | |
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| PRIORITY APPLN. INFO.: | | | US 2004-610679P | P 20040917 |
| | | | WO 2005-EP9925 | W 20050915 |
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| OTHER SOURCE(S): | MARPAT 144:312080 | | | |
| GI | | | | |

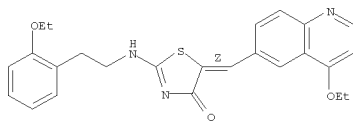
L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



AB The present invention relates to thiazolinone monosubstituted quinoline derivs. (shown as I; variables defined below; e.g. (Z)-5-(4-Methoxyquinolin-6-ylmethylidene)-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one (shown as II)), where the quinoline ring is mono-substituted at the 4 positions, which derivs. demonstrate CDK 1 antiproliferative activity and are useful as anti-cancer agents; to processes making said derivs. as well as medicaments containing them. For I: R1 is H, lower alkyl, aryloxy-lower alkyl, lower alkoxy-lower alkyl, -C(O)O(CH2CH2O)nR9, [CH2CH2O]nR9 or R2(X)n-7 X is lower alkylene, hydroxy-lower alkylene, cycloalkylene, aryl-lower alkylene, carboxy-lower alkylene, amido-lower alkylene, mono- or di- halo lower alkylene, amino-lower alkylene, mono- or di- lower alkyl amino lower alkylene or imido-lower alkylene; R2 is R5-R7-substituted ring P where P = aryl, cycloalkyl containing 3-6 C atoms, 4-6 membered heterocycloalkyl containing 3-5 C atoms and 1-2 hetero atoms O, N and S, or a 5 or 6 membered heteroarom. ring containing 1-2 hetero atoms O, S and N. R5, R6 and R7 = hydroxy, lower alkyl sulfone, hydroxy-lower alkyl, H, lower alkyl, halo, perfluorolower alkyl, lower alkoxy, amino, mono- or di- lower alkyl amino, or when two of the substituents R5, R6 and R7 are substituted on adjacent C atoms on ring P, these 2 substituents can be taken together with their adjacent, attached C atoms to form an aryl, 3-6 membered cycloalkyl, 4-6 membered heterocycloalkyl or 4-6 membered heteroarom. ring, said heterocycloalkyl ring and said heteroarom. ring containing 1-2 hetero atoms O, N or S; R4 = halo, -(CH2)mNR15R16, -(O)k(CH2CH2O)yR10, (R17- and R18-substituted ring R)-C(O)w(O)k-, -SR12 or -(O)CH2tR14. Ring R = aryl, cycloalkyl containing 3-6 C atoms, 4-6 membered heterocyclic alkyl containing 3-5 C atoms and 1-2 hetero atoms O, S and N, or a 5-6 membered heteroarom. ring containing 1-2 hetero atoms O, S and N; R8, R9, R11, R15 and R16 = H or lower alkyl; R10 and R12, are lower alkyl; R14 is perfluoro lower alkyl or -NR15R16; R17 and R18 = H, lower alkyl, or -(CH2)zC(=O)OR11; n and k = 0-1; m, w, y and z = 0-3; p = 0-6; and v and t = 1-6. Also included are N-oxides of compds. where R2 contains a N in the heterocycloalkyl or heteroarom. ring and sulfones where R2 contains a S in the heterocycloalkyl or heteroarom. ring. Methods of preparation are claimed and prepn. and/or characterization data for .apprx.50 examples of I are included. For example, II was prepared in 9 steps (87, 97, 6, 98, 95, 98, 5, 90, 8, 64, 58, 73 %, resp.) starting with ethoxide displacement from di-Et 2-thoxymethylsulfonate by 4-bromoaniline to give 2-[(4-bromophenylamino)methylene]malonic acid di-Et ester followed by formation of the following intermediates: 6-bromo-4-hydroxyquinoline-3-carboxylic acid Et ester, 6-bromo-4-hydroxyquinoline-3-carboxylic acid, 6-bromoquinolin-4-ol, 6-bromo-4-chloroquinoline, 6-bromo-4-methoxyquinoline, and 4-methoxyquinoline-6-carboxaldehyde, 2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one. CDK1/Cyclin B inhibitory

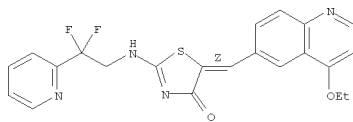
L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
activity is tabulated for 8 examples of I.
IT 879324-56-8P, (Z)-2-[[2-(2-Ethoxyphenyl)ethyl]amino]-5-[1-(4-ethoxyquinolin-6-yl)methylidene]thiazol-4-one 879324-59-1P,
(Z)-2-[[2-(2-Difluoro-2-(pyridin-2-yl)ethyl)amino]-5-[1-(4-ethoxyquinolin-6-yl)methylidene]thiazol-4-one
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of thiazolinone 4-monosubstituted quinolines as CDK1-Cyclin B inhibitors for use as anti-cancer agents)
RN 879324-56-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-ethoxyphenyl)ethyl]amino]-5-[[4-ethoxy-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 879324-59-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2,2-difluoro-2-(2-pyridinyl)ethyl]amino]-5-[[4-ethoxy-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

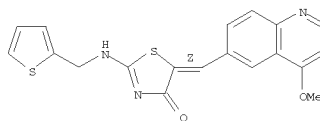


IT 879323-72-5P, (Z)-5-(4-Methoxyquinolin-6-ylmethylidene)-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879323-76-9P,
(Z)-5-(4-Ethoxyquinolin-6-ylmethylidene)-2-[[2-(2-hydroxy-1-(R)-phenylethyl)amino]thiazol-4-one 879323-79-2P,
(Z)-5-(4-Ethoxyquinolin-6-ylmethylidene)-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879323-81-6P,
(Z)-5-(4-Chloroquinolin-6-ylmethylidene)-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879323-83-8P,
(Z)-2-[[2-(2-Hydroxy-1-(R)-phenylethyl)amino]-5-(4-methoxyquinolin-6-ylmethylidene)thiazol-4-one 879323-84-9P,
(Z)-5-[4-(Cyclohexylmethoxy)quinolin-6-ylmethylidene]-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879323-88-3P,
(Z)-5-[4-(Cyclohexylmethoxy)quinolin-6-ylmethylidene]-2-[[2-(2-hydroxy-1-(R)-phenylethyl)amino]thiazol-4-one 879323-94-1P,
(Z)-5-[4-(Morpholin-4-yl)quinolin-6-ylmethylidene]-2-[[2-(2-hydroxy-1-(R)-phenylethyl)amino]thiazol-4-one 879323-95-2P,
(Z)-5-[4-(Morpholin-4-yl)quinolin-6-ylmethylidene]-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879323-99-6P,
(Z)-5-[4-(2-Methoxyethoxy)quinolin-6-ylmethylidene]-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879324-00-2P,
(Z)-5-[4-(2-Methoxyethoxy)quinolin-6-ylmethylidene]-2-[[2-(2-hydroxy-1-(R)-phenylethyl)amino]thiazol-4-one 879324-10-4P,
(Z)-2-[[2-(2-Chlorobenzyl)amino]-5-(4-ethoxyquinolin-6-ylmethylidene)thiazol-4-one 879324-13-7P, (Z)-2-[[2-(2-Chloro-6-methylbenzyl)amino]-5-

L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
(4-ethoxyquinolin-6-ylmethylidene)thiazol-4-one 879324-17-1P,
(Z)-5-(4-Ethoxyquinolin-6-ylmethylidene)-2-[[[(3-methyl)thiophen-2-yl)methyl]amino]thiazol-4-one 879324-19-3P,
(Z)-5-(4-Phenoxyquinolin-6-ylmethylidene)-2-[[[(thiophen-2-yl)methyl]amino]thiazol-4-one 879324-27-3P,
(Z)-2-[[2-(2-Chloro-4-fluorobenzyl)amino]-5-(4-ethoxyquinolin-6-ylmethylidene)thiazol-4-one 879324-34-2P,
(Z)-2-[[[(5-Methylpyrazin-2-yl)methyl]amino]-5-(4-ethoxyquinolin-6-ylmethylidene)thiazol-4-one 879324-37-5P,
(Z)-5-(4-Ethoxyquinolin-6-ylmethylidene)-2-[[2-(4-hydroxyphenyl)ethyl]amino]thiazol-4-one 879324-39-7P,
(Z)-5-[4-(2-Dimethylaminoethoxy)quinolin-6-ylmethylidene]-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 879324-41-1P,
(Z)-2-[[2-(3-Fluorophenyl)ethyl]amino]-5-[4-(2,2,2-trifluoroethoxy)quinolin-6-ylmethylidene]thiazol-4-one 879324-47-7P, (Z)-5-(4-Ethylsulfanylamino)quinolin-6-ylmethylidene)-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 879324-54-6P,
(Z)-5-[4-(4-Ethoxyquinolin-6-yl)methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one 879324-58-0P,
(Z)-2-[[2-(2-Ethoxyphenyl)ethyl]amino]-5-[1-(4-ethoxyquinolin-6-yl)methylidene]thiazol-4-one mono(methanesulfonate) 879324-60-4P
(Z)-2-[[2,2-Difluoro-2-(pyridin-2-yl)ethyl]amino]-5-[1-(4-ethoxyquinolin-6-yl)methylidene]thiazol-4-one mono(methanesulfonate)
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; prepn. of thiazolinone 4-monosubstituted quinolines as CDK1-Cyclin B inhibitors for use as anti-cancer agents)

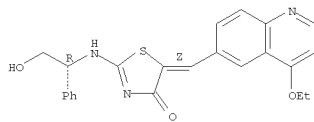
RN 879323-72-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-methoxy-6-quinolinyl)methylene]-2-[[2-(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



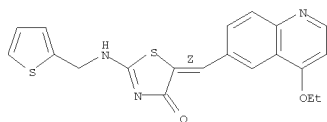
RN 879323-76-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-ethoxy-6-quinolinyl)methylene]-2-[[2-(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



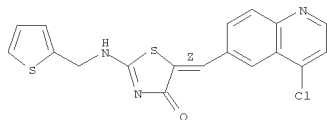
RN 879323-79-2 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-ethoxy-6-quinolinyl)methylene]-2-[[2-(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



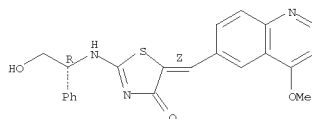
RN 879323-81-6 CAPLUS
CN 4(5H)-Thiazolone, 5-[(4-chloro-6-quinolinyl)methylene]-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



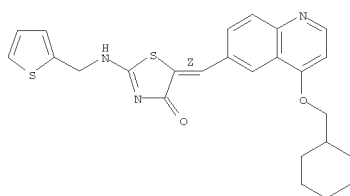
RN 879323-83-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-5-[(4-methoxy-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

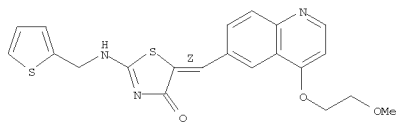


RN 879323-84-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(cyclohexylmethoxy)-6-quinolinyl)methylene]-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

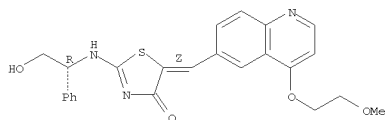


L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
Double bond geometry as shown.



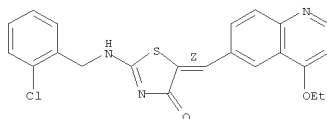
RN 879324-00-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-5-[(4-(2-methoxyethoxy)-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



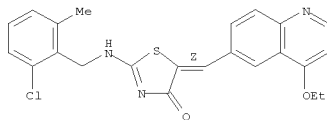
RN 879324-10-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(2-chlorophenyl)methyl]amino]-5-[(4-ethoxy-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 879324-13-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(2-chloro-6-methylphenyl)methyl]amino]-5-[(4-ethoxy-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

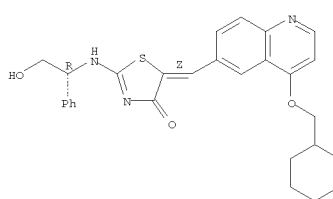


RN 879324-17-1 CAPLUS
CN 4(5H)-Thiazolone, 5-[(4-ethoxy-6-quinolinyl)methylene]-2-[[3-methyl-2-thienyl)methyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

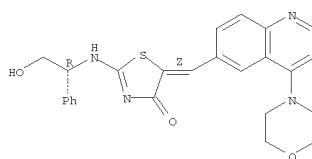
L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
RN 879323-88-3 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(cyclohexylmethoxy)-6-quinolinyl)methylene]-2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



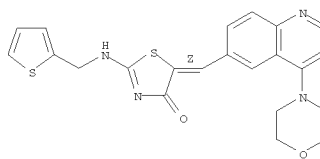
RN 879323-94-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-5-[[4-(4-morpholinyl)-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



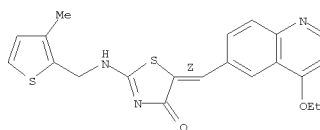
RN 879323-95-2 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(4-morpholinyl)-6-quinolinyl)methylene]-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



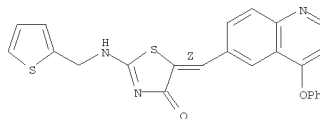
RN 879323-99-6 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(2-methoxyethoxy)-6-quinolinyl)methylene]-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

L4 ANSWER 25 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



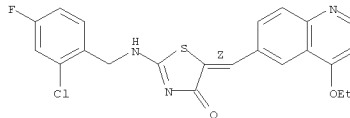
RN 879324-19-3 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(4-phenoxy-6-quinolinyl)methylene]-2-[(2-thienylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



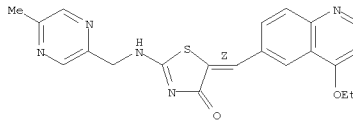
RN 879324-27-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(2-chloro-4-fluorophenyl)methyl]amino]-5-[(4-ethoxy-6-quinolinyl)methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



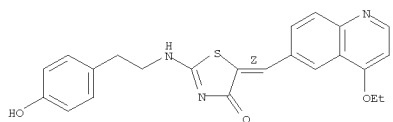
RN 879324-34-2 CAPLUS
CN 4(5H)-Thiazolone, 5-[(4-ethoxy-6-quinolinyl)methylene]-2-[[5-methyl-2-pyrazinyl)methyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



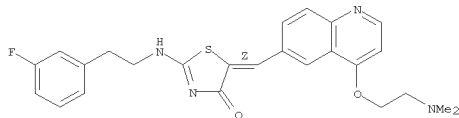
RN 879324-37-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(4-ethoxy-6-quinolinyl)methylene]-2-[[2-(4-hydroxyphenyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



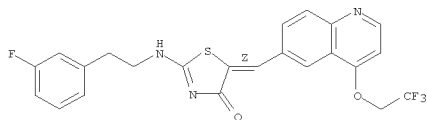
RN 879324-39-7 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-[[2-(dimethylamino)ethoxy]-6-quinolinyl]methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



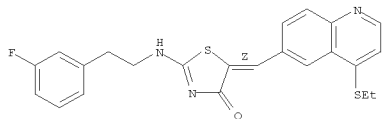
RN 879324-41-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-fluorophenyl)ethyl]amino]-5-[[4-(2,2,2-trifluoroethoxy)-6-quinolinyl]methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



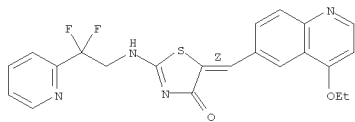
RN 879324-47-7 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(ethylthio)-6-quinolinyl]methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 879324-54-6 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(ethoxy-6-quinolinyl)methylene]-2-[[2-(3-fluorophenyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



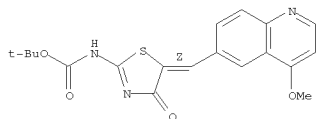
CM 2
CRN 75-75-2
CMF C H4 O3 S



IT 879324-04-6P, (Z)-[5-(4-Methoxyquinolin-6-ylmethylidene)-4-oxo-4,5-dihydrothiazol-2-yl]carbamate tert-butyl ester
879324-08-0P, (Z)-[5-[4-(2-Methoxyethoxy)quinolin-6-ylmethylidene]-4-oxo-4,5-dihydrothiazol-2-yl]carbamate tert-butyl ester
879324-26-2P, (Z)-[5-(4-Phenoxyquinolin-6-ylmethylidene)-4-oxo-4,5-dihydrothiazol-2-yl]carbamate tert-butyl ester
879324-33-1P, (Z)-[5-(4-Butoxyquinolin-6-ylmethylidene)-4-oxo-4,5-dihydrothiazol-2-yl]carbamate tert-butyl ester
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiazolinone 4-monosubstituted quinolines as CDK1-Cyclin B inhibitors for use as anti-cancer agents)

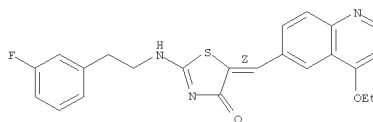
RN 879324-04-6 CAPLUS
CN Carbamate, [(5Z)-4,5-dihydro-5-[[4-(2-methoxy-6-quinolinyl)methylene]-4-oxo-2-thiazolyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 879324-08-0 CAPLUS
CN Carbamate, [(5Z)-4,5-dihydro-5-[[4-(2-methoxyethoxy)-6-quinolinyl]methylene]-4-oxo-2-thiazolyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

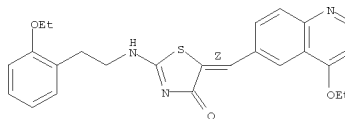


RN 879324-58-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-ethoxyphenyl)ethyl]amino]-5-[[4-(ethoxy-6-quinolinyl)methylene]-, (5Z)-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 879324-56-8
CMF C25 H25 N3 O3 S

Double bond geometry as shown.



CM 2

CRN 75-75-2
CMF C H4 O3 S

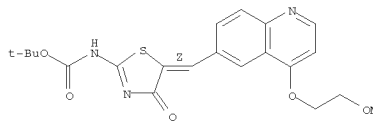


RN 879324-60-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-difluoro-2-(2-pyridinyl)ethyl)amino]-5-[[4-ethoxy-6-quinolinyl)methylene]-, (5Z)-, methanesulfonate (1:1) (CA INDEX NAME)

CM 1

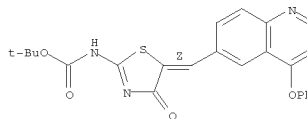
CRN 879324-59-1
CMF C22 H18 F2 N4 O2 S

Double bond geometry as shown.



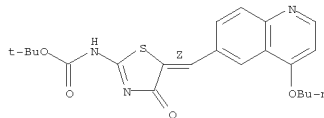
RN 879324-26-2 CAPLUS
CN Carbamate, [(5Z)-4,5-dihydro-4-oxo-5-[[4-(phenoxy-6-quinolinyl)methylene]-2-thiazolyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 879324-33-1 CAPLUS
CN Carbamate, [(5Z)-5-[[4-(butoxy-6-quinolinyl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2006:13243 CAPLUS
DOCUMENT NUMBER: 144:108310
TITLE: Thiazolinone 3,4-disubstituted quinolines as CDK1 inhibitors for treating cancer
INVENTOR(S): Chen, Li; Chen, Shaoqing; Michoud, Christophe
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: U.S. Pat. Appl. Publ., 66 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|------------|
| US 20060004046 | A1 | 20060105 | US 2005-170450 | 20050629 |
| US 7250515 | B2 | 20070731 | | |
| AU 2005259511 | A1 | 20060112 | AU 2005-259511 | 20050623 |
| CA 2571732 | A1 | 20060112 | CA 2005-2571732 | 20050623 |
| WO 2006002828 | A1 | 20060112 | WO 2005-EP6806 | 20050623 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CG, DE, DK, DM, DG, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MG, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| EP 1771443 | A1 | 20070411 | EP 2005-745044 | 20050623 |
| EP 1771443 | B1 | 20090107 | | |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV | | | | |
| CN 1976927 | A | 20070606 | CN 2005-80021959 | 20050623 |
| JP 20080504323 | T | 20080214 | JP 2007-518511 | 20050623 |
| BR 2005012843 | A | 20080408 | BR 2005-12843 | 20050623 |
| AT 420086 | T | 20090115 | AT 2005-745044 | 20050623 |
| ES 2317238 | T3 | 20090416 | ES 2005-745044 | 20050623 |
| AR 49539 | A1 | 20060809 | AR 2005-102684 | 20050629 |
| ZA 2006010535 | A | 20090429 | ZA 2006-10535 | 20061214 |
| MX 2006015026 | A | 20070208 | MX 2006-15026 | 20061219 |
| KR 2007027656 | A | 20070309 | KR 2006-7027955 | 20061229 |
| KR 856363 | B1 | 20080904 | | |
| IN 2006CN04824 | A | 20071005 | IN 2006-CN4824 | 20061229 |
| NO 2007000565 | A | 20070208 | NO 2007-565 | 20070130 |
| PRIORITY APPLN. INFO.: | | | US 2004-584931P | P 20040701 |
| | | | US 2005-658273P | P 20050303 |
| | | | WO 2005-EP6806 | W 20050623 |
| OTHER SOURCE(S): CASREACT 144:108310; MARPAT 144:108310 | | | | |
| GI | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

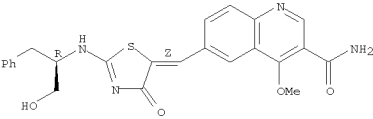
AB Title compds. I [R1 = lower alkyl, lower alkoxy, aryloxy lower alkyl, hydroxy lower alkyl, lower alkoxy lower alkyl, -(X)n-R2, etc.; X = lower alkylene, cyclo lower alkylene, aryl lower alkylene, etc.; R2 = (un)substituted hetero/aryl, cycloalkyl, heterocycloalkyl; R3 = CN, SO2-R10, CO2H and derivs., etc.; R10 = lower alkyl; R4 = lower alkyl, O-hydroxyalkyl, O(CH2CH2O)mR10 (R10 defined as above); n = 0-1; m = 1-3; and the N-oxides of compds. I where R2 contains a N in the

L4 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

CN 3-Quinolonecarboxamide, 6-[(Z)-2-[[[(1R)-1-(hydroxymethyl)-2-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-methoxy-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1
CRN 872576-68-6
CMF C24 H22 N4 O4 S

Absolute stereochemistry.
Double bond geometry as shown.

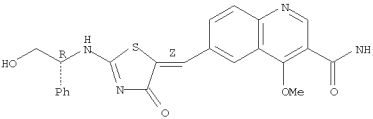


CM 2
CRN 76-05-1
CMF C2 H F3 O2



RN 872576-71-1 CAPLUS
CN 3-Quinolonecarboxamide, 6-[(Z)-2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-methoxy- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 872576-75-5 CAPLUS
CN 3-Quinolonecarboxylic acid, 6-[(Z)-2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-methoxy- (CA INDEX NAME)

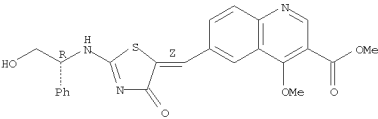
Absolute stereochemistry.
Double bond geometry as shown.

L4 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
heterocycloalkyl or heteroaryl ring, and the sulfones of compds. I where R2 contains a S in the heterocycloalkyl or heteroaryl ring; and their pharmaceutically acceptable salts] were prepd. as CDK1 inhibitors. Thus, reacting 6-formyl-4-methoxy-3-(5-methyloxazol-2-yl)quinoline (prepn. given) with 2-[[[2-(3-fluorophenyl)ethyl]amino]thiazol-4-one (prepn. given) gave quinoline (Z)-II. I exhibited CDK1/Cyclin B activity with Ki values of less than 5.0 μM in kinase assays using recombinant human CDK1/Cyclin B complex. I are useful as antiproliferation agents for treating cancer.

IT 872576-73-3P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preparation of thiazolinone disubstituted quinolines as CDK1 inhibitors for treating cancer)

RN 872576-73-3 CAPLUS
CN 3-Quinolonecarboxylic acid, 6-[(Z)-2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-methoxy-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

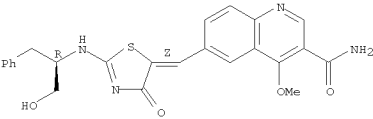


IT 872576-68-6P 872576-69-7P 872576-71-1P
872576-75-5P 872576-88-0P 872576-89-1P
872576-97-1P 872577-02-1P 872577-03-2P
872577-04-3P 872577-06-5P 872577-07-6P
872577-08-7P 872577-09-8P 872577-11-2P
872577-12-3P 872577-13-4P 872577-22-5P
872577-27-0P 872577-28-1P 872577-38-3P
872577-41-8P 872577-45-2P 872577-78-1P
872577-83-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of thiazolinone disubstituted quinolines as CDK1 inhibitors for treating cancer)

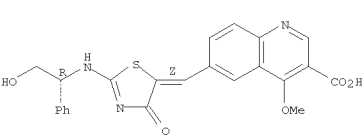
RN 872576-68-6 CAPLUS
CN 3-Quinolonecarboxamide, 6-[(Z)-2-[[[(1R)-1-(hydroxymethyl)-2-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-methoxy- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



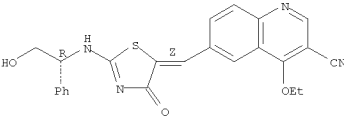
RN 872576-69-7 CAPLUS

L4 ANSWER 26 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



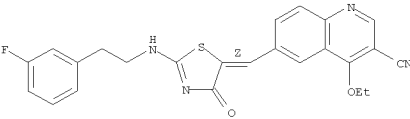
RN 872576-88-0 CAPLUS
CN 3-Quinolonecarbonitrile, 4-ethoxy-6-[(Z)-2-[[[(1R)-2-hydroxy-1-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



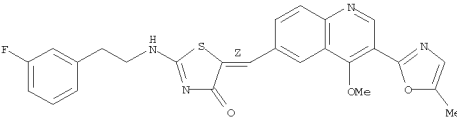
RN 872576-89-1 CAPLUS
CN 3-Quinolonecarbonitrile, 4-ethoxy-6-[(Z)-2-[[[2-(3-fluorophenyl)ethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



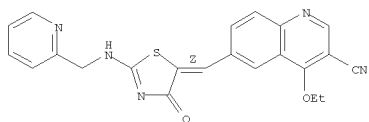
RN 872576-97-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[2-(3-fluorophenyl)ethyl]amino]-5-[[4-methoxy-3-(5-methyl-2-oxazolyl)-6-quinolinyl]methylene]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



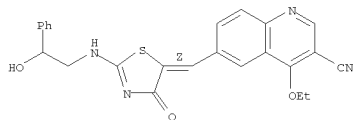
RN 872577-02-1 CAPLUS
CN 3-Quinolonecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[[2-pyridinylmethyl]amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



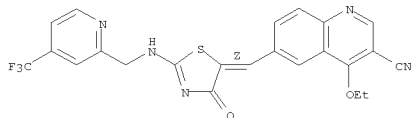
RN 872577-03-2 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[2-[(2-hydroxy-2-phenylethyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



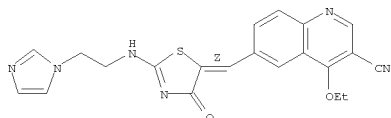
RN 872577-04-3 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[[4-(trifluoromethyl)-2-pyridinyl]methyl]amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



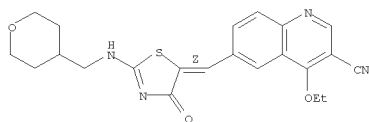
RN 872577-06-5 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[2-[(1H-imidazol-1-yl)ethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



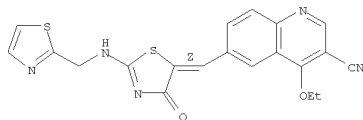
RN 872577-07-6 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[(2-pyrazinylmethyl)amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



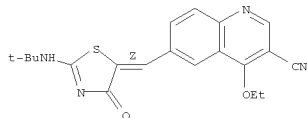
RN 872577-13-4 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[(2-thiazolylmethyl)amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



RN 872577-22-5 CAPLUS
CN 3-Quinolinecarbonitrile, 6-[(Z)-[2-[(1,1-dimethylethyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-ethoxy- (CA INDEX NAME)

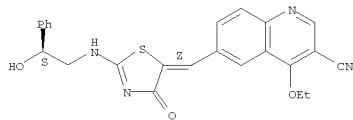
Double bond geometry as shown.



RN 872577-27-0 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[2-[(2S)-2-hydroxy-2-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

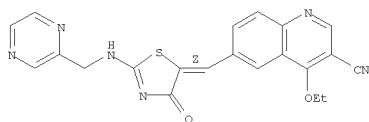
Double bond geometry as shown.



RN 872577-28-1 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[2-[(2R)-2-hydroxy-2-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

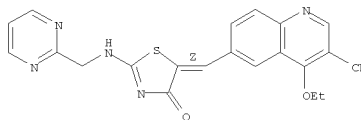
Absolute stereochemistry.

Double bond geometry as shown.



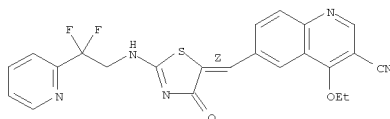
RN 872577-08-7 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[(2-pyrimidinylmethyl)amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



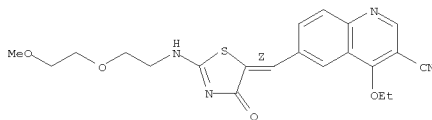
RN 872577-09-8 CAPLUS
CN 3-Quinolinecarbonitrile, 6-[(Z)-[2-[[2,2-difluoro-2-(2-methoxyethoxy)ethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-ethoxy- (CA INDEX NAME)

Double bond geometry as shown.



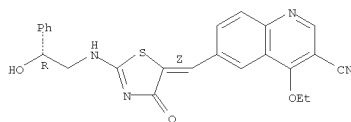
RN 872577-11-2 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[2-[(2-methoxyethoxy)ethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

Double bond geometry as shown.



RN 872577-12-3 CAPLUS
CN 3-Quinolinecarbonitrile, 4-ethoxy-6-[(Z)-[4-oxo-2-[(tetrahydro-2H-pyran-4-yl)methyl]amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

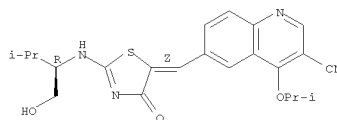
Double bond geometry as shown.



RN 872577-38-3 CAPLUS
CN 3-Quinolinecarbonitrile, 6-[(Z)-[2-[(1R)-1-(hydroxymethyl)-2-methylpropyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-(1-methylethoxy)- (CA INDEX NAME)

Absolute stereochemistry.

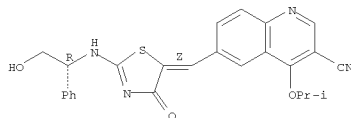
Double bond geometry as shown.



RN 872577-41-8 CAPLUS
CN 3-Quinolinecarbonitrile, 6-[(Z)-[2-[(1R)-2-hydroxy-1-phenylethyl]amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-(1-methylethoxy)- (CA INDEX NAME)

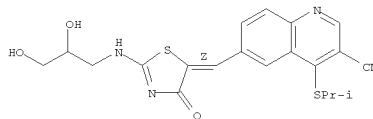
Absolute stereochemistry.

Double bond geometry as shown.



RN 872577-45-2 CAPLUS
CN 3-Quinolinecarbonitrile, 6-[(Z)-[2-[(2,3-dihydroxypropyl)amino]-4-oxo-5(4H)-thiazolylidene]methyl]-4-[(1-methylethyl)thio]- (CA INDEX NAME)

Double bond geometry as shown.



RN 872577-78-1 CAPLUS
CN 3-Quinolinecarbonitrile, 4-(1-methylethoxy)-6-[(Z)-[4-oxo-2-[(2-thienylmethyl)amino]-5(4H)-thiazolylidene]methyl]- (CA INDEX NAME)

ANSWER 27 OF 43 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

ylidene]thiazol-4-one 872574-09-3P,
2-[[2-(Furidin-2-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-10-2P,
2-[[2-(Furidin-3-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-11-3P,
2-[[2-(Thiophen-2-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-12-4P,
2-[[2-(3H-imidazol-4-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-13-5P,
2-[[2-(Furidin-4-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-14-6P,
2-[(R)-1-Hydroxymethyl-2-phenylethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-15-7P,
2-[(2-Phenoxyethyl)amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-17-9P, 2-[[1-(Thiophen-2-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-19-1P,
2-[[2-Hydroxy-1-phenylethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-20-4P,
2-[[1(1,3,5-Trimethyl-1H-pyrazol-4-yl)methyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-21-5P,
2-[(S)-2-Hydroxy-1-phenylethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-22-6P,
2-[(R)-2-Hydroxy-1-phenylethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-23-7P,
N-[4-Oxo-5-[(quinolin-6-yl)methylene]-4,5-dihydrothiazol-2-yl]thiophene-2-carboximidamide 872574-25-9P,
2-[[2-(4-Fluorophenyl)-1-(hydroxymethyl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-26-0P,
2-[(R)-1-(4-Fluorophenyl)-2-hydroxyethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-27-1P,
2-[[3-(Hydroxy-2-phenylpropyl)amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-28-2P,
2-[[2-(2-Chlorophenyl)-2-dimethylaminoethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-29-3P,
2-[[2-(Morpholin-4-yl)-2-pyrimidin-2-yl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-30-6P,
2-[[1-(R)-1-(Hydroxymethyl-2-methylpropyl)amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-31-7P,
2-[(R)-1-Hydroxymethyl-2-methylpropyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-32-8P,
2-[(R)-1-Hydroxymethyl-3-methylbutyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-33-9P 872574-34-0P,
872574-35-1P, 2-[[3-(Hydroxy-1-phenylpropyl)amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-36-2P,
2-[[2-[[4-Oxo-5-[(quinolin-6-yl)methylene]-4,5-dihydrothiazol-2-yl]thiophen-2-yl]amino]-2-phenylethanamide 872574-37-3P,
2-Methylamino-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-38-4P 872574-39-5P,
2-[[1-(2,4-Difluorophenyl)-2-hydroxyethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-42-0P 872574-43-1P
872574-44-2P, 2-[[2-(Hydroxyethyl)amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-45-3P,
2-[[2-(2-Hydroxypropyl)amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-46-6P,
2-[[2-[[4-Oxo-5-[(quinolin-6-yl)methylene]-4,5-dihydrothiazol-2-yl]thiophen-2-yl]amino]-2-phenylethanamide 872574-47-5P,
2-[[2-Fluoro-6-methoxybenzyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-48-6P,
2-[(R)-1-Cyclohexyl-2-hydroxyethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-49-7P 872574-56-6P,
2-Methoxyamino-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-57-7P, 2-[[2,2-Difluoro-2-(pyridin-2-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one monohydrochloride 872574-58-8P, 2-[[2,2-Difluoro-2-(1-oxopyridin-2-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one monohydrochloride 872574-59-9P 872574-60-2P,
2-[[1(S)-1-(3-Methoxyphenyl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-61-3P

L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

ylidene]thiazol-4-one 872574-61-3P,
2-[[[(S)-1-(4-Methoxyphenyl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-62-4P,
2-[[[1-(4-Methylsulfonylphenyl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-63-5P,
2-[[[2-(Morpholin-4-yl)ethyl]amino]-5-[1-(quinolin-6-yl)meth-(Z)-ylidene]thiazol-4-one 872574-64-6P 872574-65-7P
872574-67-9P, 5-[(Quinolin-6-yl)methylene]-2-[[[(tetrahydrothiopyran-4-yl)methyl]amino]thiazol-4-one 872574-69-1P
872574-68-0P, 2-[[[(1,1-Dioxotetrahydrothiopyran-4-yl)methyl]amino]-5-[(quinolin-6-yl)methylene]thiazol-4-one 872574-69-1P
872574-73-7P, 5-[(Quinolin-6-yl)methylene]-2-[[[(tetrahydrothiopyran-4-yl)methyl]amino]thiazol-4-one 872574-74-8P
872574-80-6P 872574-82-8P 872574-83-9P
872574-84-0P 872574-89-5P 872574-90-8P
872574-92-0P 872574-93-1P 872574-94-2P
872574-95-3P 872574-96-4P 872574-97-5P
872574-98-6P 872574-99-7P

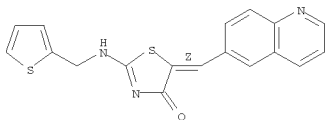
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of thiazolinone unsubstituted quinolines as CDKL inhibitors for treating cancer)

RN 872573-93-8 CAPLUS

CN 4(5H)-Thiazolone, 2-(pentylamino)-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

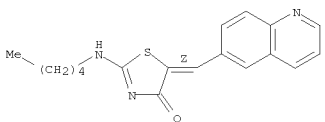
Double bond geometry as shown.



RN 872573-96-1 CAPLUS

CN 4(5H)-Thiazolone, 2-(pentylamino)-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

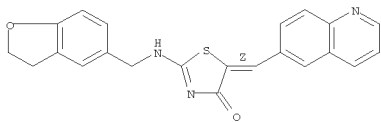


RN 872573-97-2 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(4-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

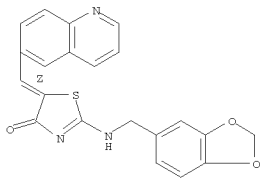
L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



RN 872574-02-2 CAPLUS

CN 4(5H)-Thiazolone, 2-[[1,3-benzodioxol-5-ylmethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

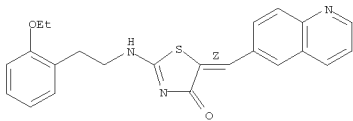
Double bond geometry as shown.



RN 872574-03-3 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(2-ethoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

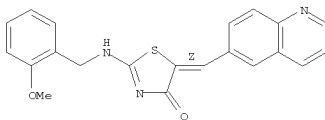
Double bond geometry as shown.



RN 872574-04-4 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(2-methoxyphenyl)methyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

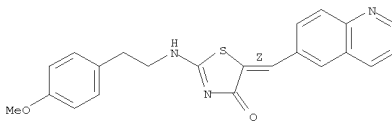
Double bond geometry as shown.



RN 872574-05-5 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(2-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

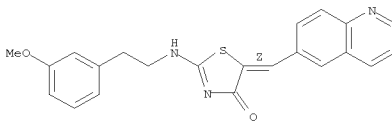
L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



RN 872573-98-3 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(3-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

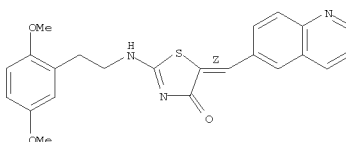
Double bond geometry as shown.



RN 872573-99-4 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(2,5-dimethoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

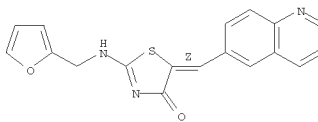
Double bond geometry as shown.



RN 872574-00-0 CAPLUS

CN 4(5H)-Thiazolone, 2-[(2-furanylmethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

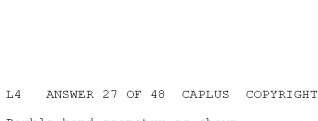
Double bond geometry as shown.



RN 872574-01-1 CAPLUS

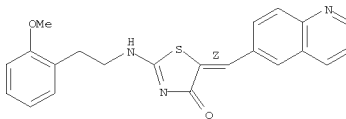
CN 4(5H)-Thiazolone, 2-[[2,3-dihydro-5-benzofuranylmethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

Double bond geometry as shown.

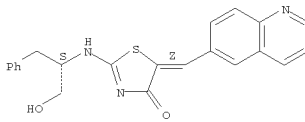


RN 872574-06-6 CAPLUS

CN 4(5H)-Thiazolone, 2-[[[(1S)-1-(hydroxymethyl)-2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.

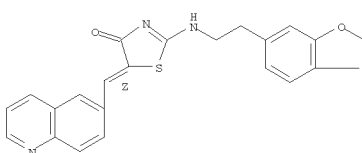
Double bond geometry as shown.



RN 872574-07-7 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(1,3-benzodioxol-5-yl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

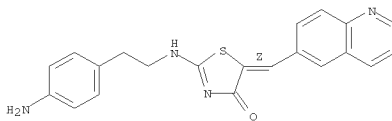
Double bond geometry as shown.



RN 872574-08-8 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(4-aminophenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

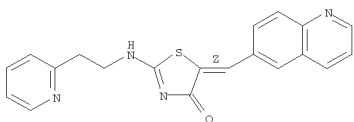
Double bond geometry as shown.



RN 872574-09-9 CAPLUS

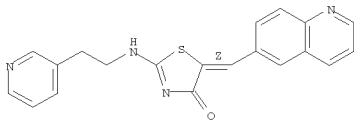
L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
CN 4(5H)-Thiazolone, 2-[[2-(2-pyridinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



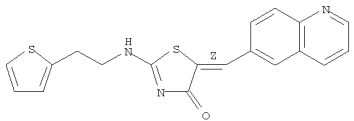
RN 872574-10-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-pyridinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



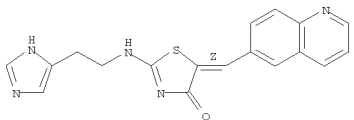
RN 872574-11-3 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[2-(2-thienyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



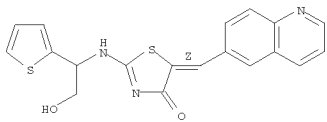
RN 872574-12-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(1H-imidazol-5-yl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



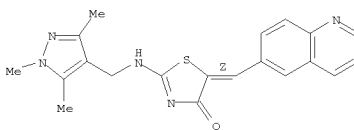
RN 872574-13-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-pyridinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
Double bond geometry as shown.



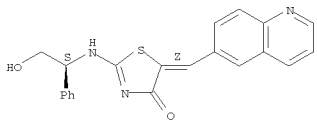
RN 872574-20-4 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[1,3,5-trimethyl-1H-pyrazol-4-yl)methyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



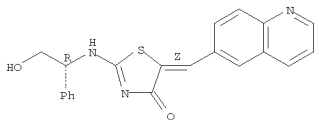
RN 872574-21-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1S)-2-hydroxy-1-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 872574-22-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-2-hydroxy-1-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

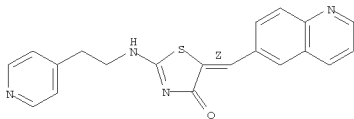
Absolute stereochemistry.
Double bond geometry as shown.



RN 872574-23-7 CAPLUS
CN 2-Thiophenecarboximidamide, N-[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]- (CA INDEX NAME)

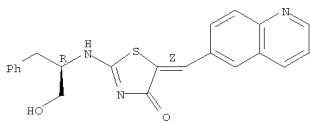
L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

Double bond geometry as shown.



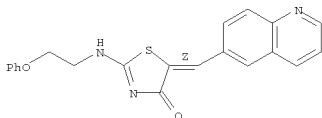
RN 872574-14-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



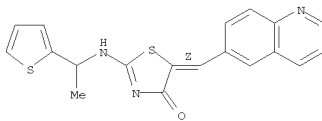
RN 872574-15-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-phenoxyethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



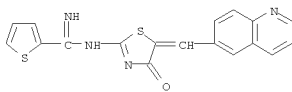
RN 872574-17-9 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[1-(2-thienyl)ethyl]amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



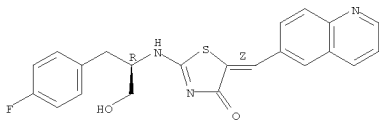
RN 872574-19-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-hydroxy-1-(2-thienyl)ethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

L4 ANSWER 27 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



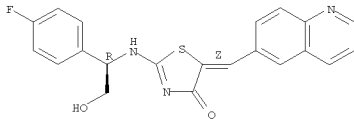
RN 872574-25-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-2-(4-fluorophenyl)-1-(hydroxymethyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



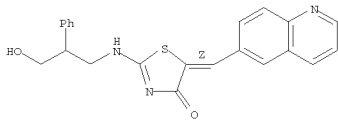
RN 872574-26-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(4-fluorophenyl)-2-hydroxyethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



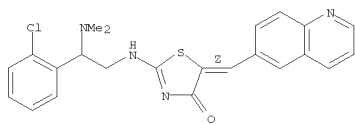
RN 872574-27-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[3-(3-hydroxy-2-phenylpropyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



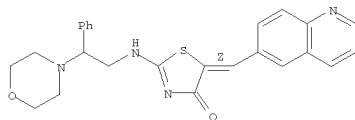
RN 872574-28-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-chlorophenyl)-2-(dimethylamino)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



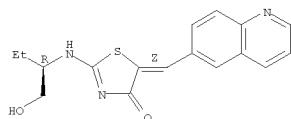
RN 872574-29-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-morpholinyl)-2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



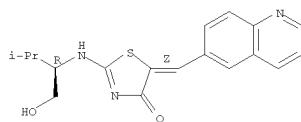
RN 872574-30-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)propyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



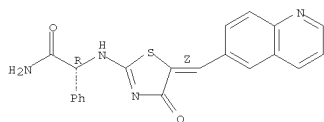
RN 872574-31-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-2-methylpropyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



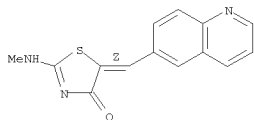
RN 872574-32-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.



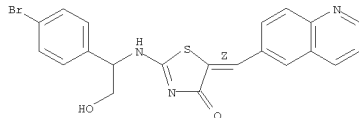
RN 872574-37-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



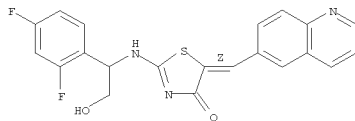
RN 872574-38-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



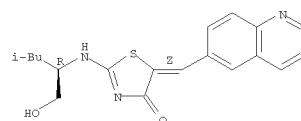
RN 872574-39-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



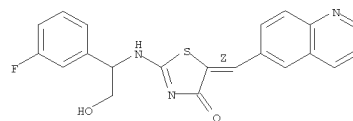
RN 872574-42-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



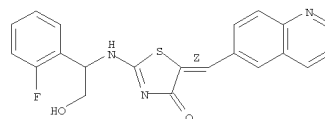
RN 872574-33-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



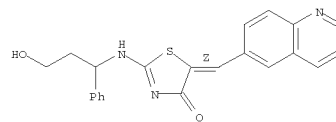
RN 872574-34-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



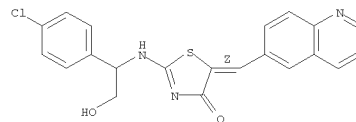
RN 872574-35-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



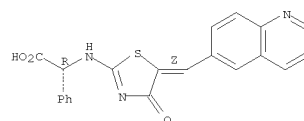
RN 872574-36-2 CAPLUS
CN Benzeneacetamide, α -[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



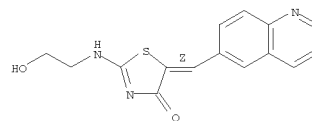
RN 872574-43-1 CAPLUS
CN Benzeneacetic acid, α -[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



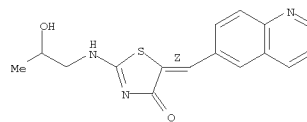
RN 872574-44-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



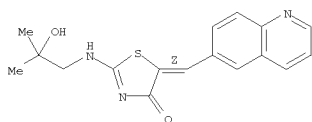
RN 872574-45-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



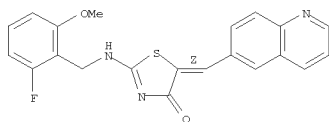
RN 872574-46-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(1R)-1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



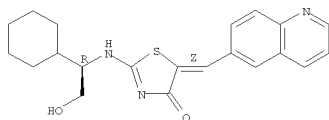
RN 872574-47-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-fluoro-6-methoxyphenyl]methyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



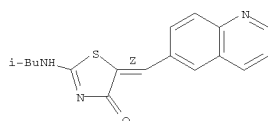
RN 872574-48-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1R)-1-cyclohexyl-2-hydroxyethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



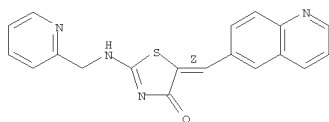
RN 872574-49-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[(2-methylpropyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



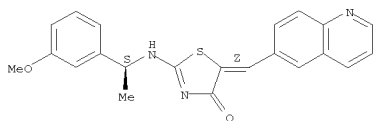
RN 872574-56-6 CAPLUS
CN 4(5H)-Thiazolone, 2-(methoxyamino)-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



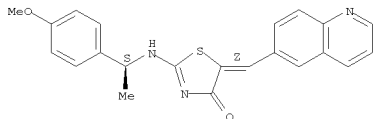
RN 872574-60-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1S)-1-(3-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



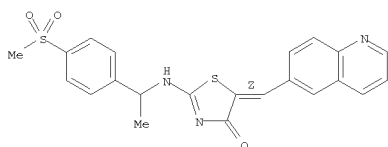
RN 872574-61-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1S)-1-(4-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

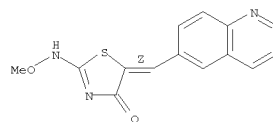


RN 872574-62-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-4-(methylsulfonyl)phenyl]ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

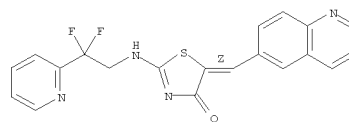


RN 872574-63-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-morpholinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)



RN 872574-57-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2,2-difluoro-2-(1-oxido-2-pyridinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, hydrochloride (1:1), (5Z)- (CA INDEX NAME)

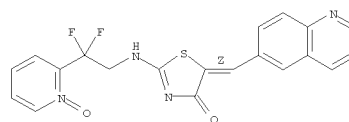
Double bond geometry as shown.



● HCl

RN 872574-58-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2,2-difluoro-2-(1-oxido-2-pyridinyl)ethyl]amino]-5-(6-quinolinylmethylene)-, hydrochloride (1:1), (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

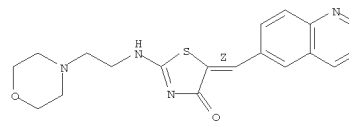


● HCl

RN 872574-59-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-pyridinylmethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

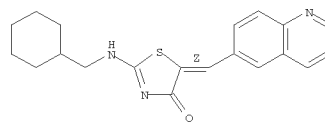
Double bond geometry as shown.

Double bond geometry as shown.



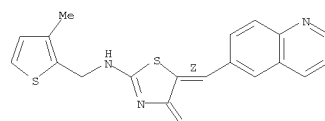
RN 872574-64-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[cyclohexylmethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

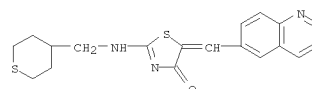


RN 872574-65-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[[3-methyl-2-thienyl]methyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

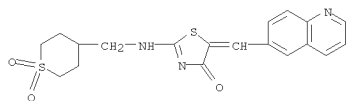
Double bond geometry as shown.



RN 872574-67-9 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[tetrahydro-2H-thiopyran-4-yl]methyl]amino]- (CA INDEX NAME)



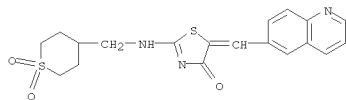
RN 872574-68-0 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[tetrahydro-1,1-dioxido-2H-thiopyran-4-yl]methyl]amino]- (CA INDEX NAME)



RN 872574-69-1 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[1-(tetrahydro-1,1-dioxido-2H-thiopyran-4-yl)methyl]amino]-, 2,2,2-trifluoroacetate (1:7) (CA INDEX NAME)

CM 1

CRN 872574-68-0
CMF C19 H19 N3 O3 S2

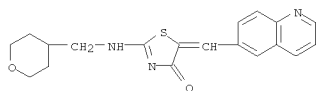


CM 2

CRN 76-05-1
CMF C2 H F3 O2



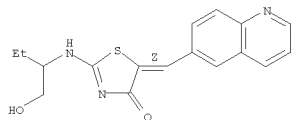
RN 872574-73-7 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[1-(tetrahydro-2H-pyran-4-yl)methyl]amino]- (CA INDEX NAME)



RN 872574-74-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(6-quinolinylmethylene)-2-[[1-(tetrahydro-2H-pyran-4-yl)methyl]amino]-, 2,2,2-trifluoroacetate (1:7) (CA INDEX NAME)

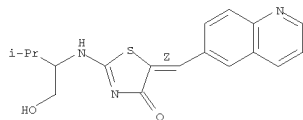
CM 1

CRN 872574-73-7
CMF C19 H19 N3 O2 S



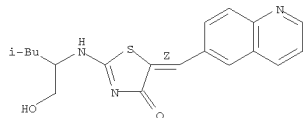
RN 872574-83-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(hydroxymethyl)-2-methylpropyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



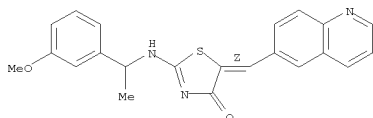
RN 872574-84-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(hydroxymethyl)-3-methylbutyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



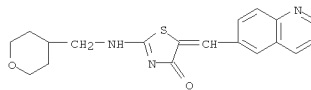
RN 872574-89-5 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(3-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 872574-90-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(4-methoxyphenyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



CM 2

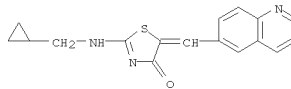
CRN 76-05-1
CMF C2 H F3 O2



RN 872574-80-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(cyclopropylmethyl)amino]-5-(6-quinolinylmethylene)-, 2,2,2-trifluoroacetate (1:7) (CA INDEX NAME)

CM 1

CRN 872574-79-3
CMF C17 H15 N3 O S



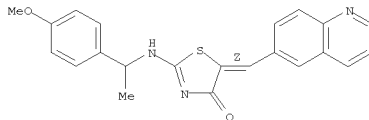
CM 2

CRN 76-05-1
CMF C2 H F3 O2



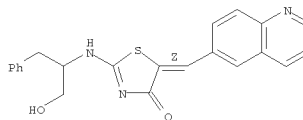
RN 872574-82-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(hydroxymethyl)propyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



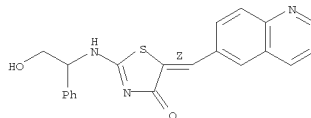
RN 872574-92-0 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(hydroxymethyl)-2-phenylethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



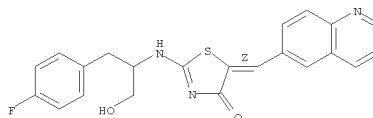
RN 872574-93-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(2-hydroxy-1-phenylethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



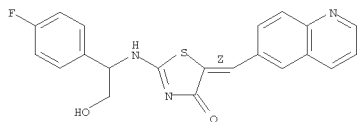
RN 872574-94-2 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(4-fluorophenyl)-1-(hydroxymethyl)ethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



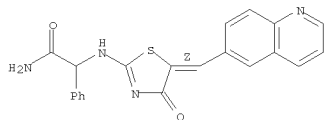
RN 872574-95-3 CAPLUS
CN 4(5H)-Thiazolone, 2-[[1-(4-fluorophenyl)-2-hydroxyethyl]amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



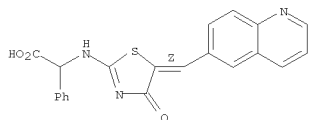
RN 872574-96-4 CAPLUS
CN Benzeneacetamide, α -[[(5Z)-4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]amino]- (CA INDEX NAME)

Double bond geometry as shown.



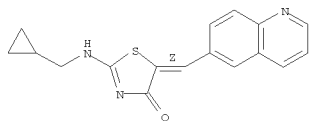
RN 872574-97-5 CAPLUS
CN Benzenecetic acid, α -[[(5Z)-4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]amino]- (CA INDEX NAME)

Double bond geometry as shown.



RN 872574-98-6 CAPLUS
CN 4(5H)-Thiazolone, 2-[(cyclopropylmethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 872574-99-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[(1-cyclohexyl-2-hydroxyethyl)amino]-5-(6-quinolinylmethylene)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

ACCESSION NUMBER: 2005:979651 CAPLUS

DOCUMENT NUMBER: 143:286417

TITLE: Preparation of thiazolone compounds for inhibiting

hYAK3 proteins
INVENTOR(S): Duffy, Kevin J.; Fitch, Duke M.; Goodman, Steven Neal; Hasegawa, Masaichi; Johnson, Neil W.; Kaspares, Jiri; Shaw, Antony N.

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA

SOURCE: PCT Int. Appl., 162 pp.

CODEN: PIXXD2

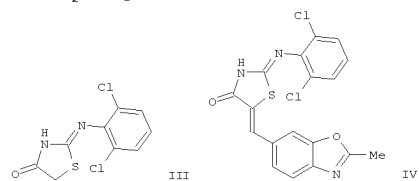
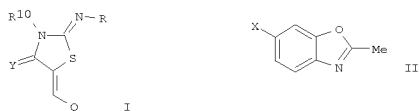
DOCUMENT TYPE: Patent

LANGUAGE: English

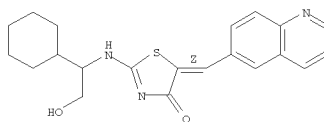
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 2005082901 | A1 | 20050909 | WO 2005-US6022 | 20050224 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1718642 | A1 | 20061108 | EP 2005-723757 | 20050224 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS | | | | |
| JP 2007523957 | T | 20070823 | JP 2007-500992 | 20050224 |
| US 20070249599 | A1 | 20071025 | US 2006-590623 | 20060824 |
| PRIORITY APPLN. INFO.: US 2004-547543P P 20040225 | | | | |
| WO 2005-US6022 W 20050224 | | | | |
| OTHER SOURCE(S): CASREACT 143:286417; MARPAT 143:286417 | | | | |
| GI | | | | |



AB Title comps. I [wherein R = H, (un)substituted aryl or (cyclo)alkyl; Y =



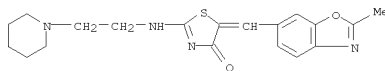
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

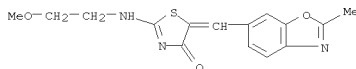
O, S or NR11; R10, R11 = H, alkyl, (CH2)mOH, (CH2)mCOOH; m = 0-6; Q = (un)substituted benzimidazol-6-yl, benzotriazol-6-yl or benzoxazol-6-yl, or pharmaceutically acceptable salts, hydrates, solvates or prodrugs thereof] were prepd. for inhibiting hYAK3 proteins. For instance, cyclization of Me 4-amino-3-hydroxybenzoate with tri-Et orthoacetate to II (X = COOMe) (72% yield) followed by redn. with LiAlH4 led to alc. II (X = CH2OH) (58% yield). This compd. underwent oxidn. with PCC to afford aldehyde II (X = CHO) (66% yield), which was condensed with thiazolidinone III in the presence of piperidine to give IV (15% yield). Comps. IV showed inhibition against hYAK3 kinase enzyme with pIC50 in the range of 8.99-8. Therefore, I and their pharmaceutical compns. (examples given) are useful for treating diseases assocd. with the imbalance or inappropriate activity of hYAK3 proteins, esp. diseases of the erythroid and hematopoietic systems.

IT 864274-17-9P 864274-20-4P 864274-21-5P
864274-23-7P 864274-25-9P 864274-26-0P
864274-27-1P 864274-31-7P 864274-32-8P
RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(Inhibitor; preparation of thiazolone compds. for inhibiting hYAK3 proteins)

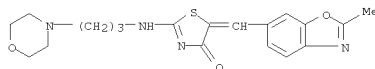
RN 864274-17-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-methyl-6-benzoxazolyl)methylene]-2-[[2-(1-piperidinyl)ethyl]amino]- (CA INDEX NAME)



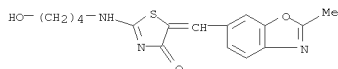
RN 864274-20-4 CAPLUS
CN 4(5H)-Thiazolone, 2-[(2-methoxyethyl)amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)



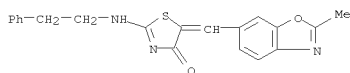
RN 864274-21-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-methyl-6-benzoxazolyl)methylene]-2-[[3-(4-morpholinyl)propyl]amino]- (CA INDEX NAME)



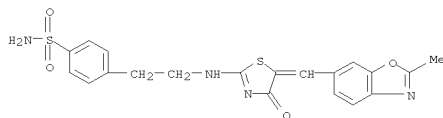
RN 864274-23-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[(4-hydroxybutyl)amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)



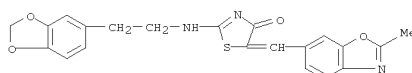
RN 864274-25-9 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2-methyl-6-benzoxazolyl)methylene]-2-[(2-phenylethyl)amino]- (CA INDEX NAME)



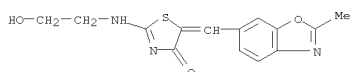
RN 864274-26-0 CAPLUS
CN Benzenesulfonamide, 4-[2-[[4,5-dihydro-5-[(2-methyl-6-benzoxazolyl)methylene]-4-oxo-2-thiazolyl]amino]ethyl]- (CA INDEX NAME)



RN 864274-27-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(1,3-benzodioxol-5-yl)ethyl]amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)



RN 864274-31-7 CAPLUS
CN 4(5H)-Thiazolone, 2-[(2-hydroxyethyl)amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)

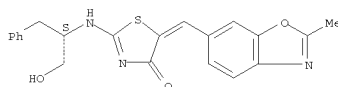


RN 864274-32-8 CAPLUS
CN 4(5H)-Thiazolone, 2-[[[(1S)-1-(hydroxymethyl)-2-phenylethyl]amino]-5-[(2-methyl-6-benzoxazolyl)methylene]- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry unknown.

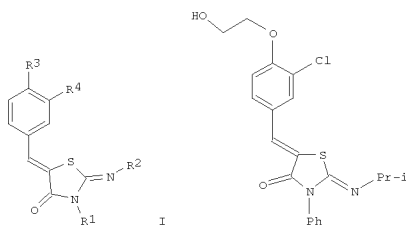
ACCESSION NUMBER: 2005:523434 CAPLUS
DOCUMENT NUMBER: 143:59967
TITLE: Preparation of 2-imino-5-benzylidenethiazolidin-4-one derivatives as immunosuppressants
INVENTOR(S): Bolli, Martin; Scherr, Michael; Mueller, Claus;
PATENT ASSIGNEE(S): Mathys, Boris; Binkert, Christoph
SOURCE: Actelion Pharmaceuticals Ltd., Switz.
PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|------------------|-------------|
| WO 2005054215 | A1 | 20050616 | WO 2004-EP12953 | 20041116 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2004295047 | A1 | 20050616 | AU 2004-295047 | 20041116 |
| CA 2545582 | A1 | 20050616 | CA 2004-2545582 | 20041116 |
| EP 1689726 | A1 | 20060816 | EP 2004-819591 | 20041116 |
| EP 1689726 | B1 | 20101006 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR, IS | | | | |
| CN 1882555 | A | 20061220 | CN 2004-80034209 | 20041116 |
| CN 100567275 | C | 20091209 | | |
| BR 2004016752 | A | 20070227 | BR 2004-16752 | 20041116 |
| JP 2007511563 | T | 20070510 | JP 2006-540283 | 20041116 |
| JP 4061332 | B2 | 20080319 | | |
| RU 2379299 | C2 | 20100120 | RU 2006-121651 | 20041116 |
| NZ 547962 | A | 20100625 | NZ 2004-547962 | 20041116 |
| AT 483698 | T | 20101015 | AT 2004-819591 | 20041116 |
| PT 1689726 | E | 20101209 | PT 2004-819591 | 20041116 |
| ES 2352555 | T3 | 20110221 | ES 2004-819591 | 20041116 |
| AR 47128 | A1 | 20060111 | AR 2004-104281 | 20041119 |
| TW 323659 | B | 20100421 | TW 2004-135720 | 20041119 |
| MX 2006005590 | A | 20060725 | MX 2006-5590 | 20060517 |
| KR 2006117328 | A | 20061116 | KR 2006-7009783 | 20060519 |
| KR 783835 | B1 | 20071210 | | |
| NO 2006002483 | A | 20060810 | NO 2006-2483 | 20060530 |
| ZA 2006005077 | A | 20070530 | ZA 2006-5077 | 20060620 |
| IN 2006CN02225 | A | 20070608 | IN 2006-CN2225 | 20060621 |
| US 20070082933 | A1 | 20070412 | US 2006-580169 | 20061201 |
| US 7435828 | B2 | 20081014 | | |
| JP 2008081504 | A | 20080410 | JP 2007-279142 | 20071026 |
| JP 4129286 | B2 | 20080806 | | |
| US 20080146629 | A1 | 20080619 | US 2008-26277 | 20080205 |
| US 7626037 | B2 | 20091201 | | |
| US 20080280962 | A1 | 20081113 | US 2008-132443 | 20080603 |
| US 7875726 | B2 | 20110125 | | |
| US 20090275625 | A1 | 20091105 | US 2009-496945 | 20090702 |
| PRIORITY APPLN. INFO.: | | | WO 2003-EP13072 | A 20031121 |
| | | | JP 2006-540283 | A3 20041116 |
| | | | WO 2004-EP12953 | W 20041116 |
| | | | US 2006-580169 | A1 20061201 |
| | | | US 2008-132443 | A3 20080603 |



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): CASREACT 143:59967; MARPAT 143:59967
GI



AB The invention relates to pharmaceutical compns. containing at least one 5-(benz-(Z)-ylidene)thiazolidin-4-one derivative (shown as I; variables defined below; e.g. 5-[3-chloro-4-(2-hydroxyethoxy)benz-(Z)-ylidene]-2-((Z)-isopropylimino)-3-phenylthiazolidin-4-one (shown as II)), to prevent or treat disorders associated with an activated immune system. Furthermore, the invention relates to novel thiazolidin-4-one derivs. notably for use as pharmaceutically active compds. Said compds. particularly act also as immunosuppressive agents. The % reduction in the number of circulating lymphocytes in whole blood of rats is tabulated for 17 examples of I, e.g. 67 % for II at 3 mg/kg p.o. For I: R1 = lower alkyl, lower alkenyl, cycloalkyl, 5,6,7,8-tetrahydronaphth-1-yl, 5,6,7,8-tetrahydronaphth-2-yl, (un)substituted phenyl; R2 = lower alkyl, allyl, cyclopropyl, cyclobutyl, cyclopentyl, mono- or dilower alkylamino; R3 = -NR5R6, -COR7R8COR9R0 (R11R12)OR13; R4 = H, hydroxy, lower alkoxy, lower alkyl, halogen; or R3 and R4 together may form a methylenedioxy or ethylenedioxy ring optionally further substituted with a hydroxymethyl group; R5, R6 lower alkyl; R7 = H, lower alkyl, or hydroxymethyl; R8, R9, R11, R12 H or Me; R10 = H or lower alkyl; when n = 1, R10 in addition = lower alkoxy, hydroxy, -NH2, -NHR5 or -NR5R6; R13 = H, lower alkyl, hydroxycarbonyl-lower alkyl, 1-glyceryl or 2-glyceryl; n = 0 or 1; addnl. details are given in the claims. Although the methods of preparation are not claimed, preps. and/or characterization data are included for 157 examples of I and 37 precursors. For example, II was prepared from 3-chloro-4-(2-acetoxyethoxy)benzaldehyde and 2-((Z)-isopropylimino)-3-phenylthiazolidin-4-one according to a general procedure; a general method for preparing the thiazolidinone reactant is also given.

IT 854107-49-6P, 5-(Benzodioxol-5-yl)meth-(Z)-ylidene-2-((Z)-isopropylimino)-3-phenylthiazolidin-4-one 854107-52-1P, 5-[2,3-Dihydrobenzo[1,4]dioxin-6-ylmeth-(Z)-ylidene]-2-((Z)-isopropylimino)-3-(o-tolyl)thiazolidin-4-one 854108-06-8P, 5-[2,3-Dihydrobenzo[1,4]dioxin-6-ylmeth-(Z)-ylidene]-2-((Z)-isopropylimino)-3-phenylthiazolidin-4-one 854108-28-4P, 5-[3-Hydroxymethyl-2,3-dihydrobenzo[1,4]dioxin-6-ylmeth-(Z)-ylene]-2-((Z)-isopropylimino)-3-phenylthiazolidin-4-one 854108-30-8P, 5-[(Z)-2,3-Dihydro-2-(hydroxymethyl)-1,4-benzodioxin-6-yl]methylene]-2-((Z)-isopropylimino)-3-(o-tolyl)thiazolidin-4-one 854108-52-4P, 5-[(Z)-2,3-Dihydro-2-(hydroxymethyl)-1,4-benzodioxin-6-yl]methylene]-2-((Z)-isopropylimino)-3-(m-

L4 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

tolyl)thiazolidin-4-one 854108-54-6P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(m-tolyl)thiazolidin-4-one 854108-64-8P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(p-tolyl)thiazolidin-4-one 854108-66-0P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(p-tolyl)thiazolidin-4-one 854108-74-0P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(2,3-dimethylphenyl)thiazolidin-4-one 854108-76-2P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(2,3-dimethylphenyl)thiazolidin-4-one 854108-94-4P,
 5-[((Z)-2,3-Dihydro-2-(hydroxymethyl)-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(2,3-dimethylphenyl)thiazolidin-4-one 854108-96-6P,
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 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(2-chlorophenyl)thiazolidin-4-one 854109-06-1P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(2-chlorophenyl)thiazolidin-4-one 854109-16-3P,
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 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(3-methoxyphenyl)thiazolidin-4-one 854109-26-5P,
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 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-allylthiazolidin-4-one 854109-34-5P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-allylthiazolidin-4-one 854109-44-7P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-3-phenyl-2-((Z)-propylimino)thiazolidin-4-one 854109-46-9P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-3-phenyl-2-((Z)-propylimino)thiazolidin-4-one 854109-56-1P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-propylimino)-3-(o-tolyl)thiazolidin-4-one 854109-58-3P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-propylimino)-3-(o-tolyl)thiazolidin-4-one 854109-72-1P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-propylimino)-3-(2,3-dimethylphenyl)thiazolidin-4-one 854109-74-3P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-propylimino)-3-(2,3-dimethylphenyl)thiazolidin-4-one 854109-90-3P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-tert-Butylimino)-3-phenylthiazolidin-4-one 854110-06-8P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-Ethylimino)-3-(2-methylphenyl)thiazolidin-4-one 854110-08-0P,
 5-[(Z)-(2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-Ethylimino)-3-(2-methylphenyl)thiazolidin-4-one 854110-32-0P,
 5-[(Z)-(Benzodioxol-5-yl)methylene]-2-((Z)-sec-Butylimino)-3-phenylthiazolidin-4-one 854110-40-0P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-isopropylthiazolidin-4-one 854110-42-2P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-isopropylthiazolidin-4-one 854110-52-4P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(2-ethylphenyl)thiazolidin-4-one 854110-58-0P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(5,6,7,8-tetrahydronaphthalen-1-yl)thiazolidin-4-one 854110-60-4P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(5,6,7,8-tetrahydronaphthalen-1-yl)thiazolidin-4-one 854110-62-6P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(3-chloro-2-methylphenyl)thiazolidin-4-one 854110-64-8P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(3-chloro-2-methylphenyl)thiazolidin-4-one 854110-68-2P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-

L4 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

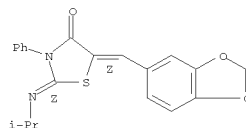
isopropylimino)-3-(3-chloro-4-methylphenyl)thiazolidin-4-one 854110-70-6P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(3-chloro-4-methylphenyl)thiazolidin-4-one 854110-74-0P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(3-trifluoromethylphenyl)thiazolidin-4-one 854110-76-2P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(3-trifluoromethylphenyl)thiazolidin-4-one 854110-80-8P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-isopropylimino)-3-(3-chlorophenyl)thiazolidin-4-one 854110-82-0P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-isopropylimino)-3-(3-chlorophenyl)thiazolidin-4-one 854110-90-0P,
 5-[((Z)-Benzodioxol-5-yl)methylene]-2-((Z)-allylimino)-3-allylthiazolidin-4-one 854110-92-2P,
 5-[((Z)-2,3-Dihydro-1,4-benzodioxin-6-yl)methylene]-2-((Z)-allylimino)-3-allylthiazolidin-4-one

Rf: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; prepn. of 2-imino-5-benzylidenethiazolidin-4-one derivs. as immunosuppressants)

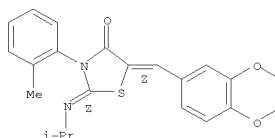
RN 854107-49-6 CAPLUS
 CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-[(1-methylethyl)imino]-3-phenyl-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 854107-52-1 CAPLUS
 CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(2-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

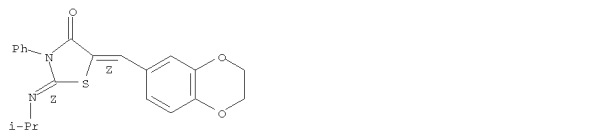
Double bond geometry as shown.



RN 854108-06-8 CAPLUS
 CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(2-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

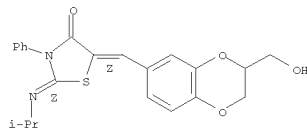
Double bond geometry as shown.

L4 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



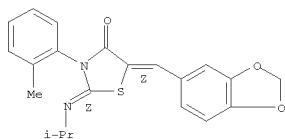
RN 854108-28-4 CAPLUS
 CN 4-Thiazolidinone, 5-[(2,3-dihydro-3-(hydroxymethyl)-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-phenyl-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



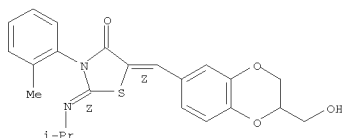
RN 854108-30-8 CAPLUS
 CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-[(1-methylethyl)imino]-3-(2-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 854108-50-2 CAPLUS
 CN 4-Thiazolidinone, 5-[(2,3-dihydro-2-(hydroxymethyl)-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(2-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

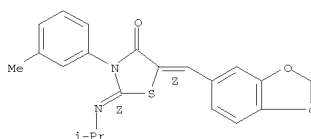
Double bond geometry as shown.



L4 ANSWER 29 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

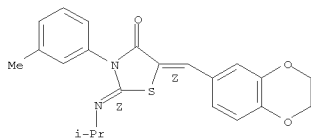
RN 854108-52-4 CAPLUS
 CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-[(1-methylethyl)imino]-3-(3-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



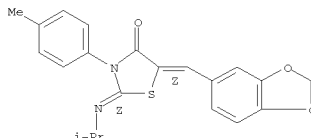
RN 854108-54-6 CAPLUS
 CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(3-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



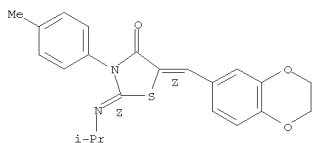
RN 854108-64-8 CAPLUS
 CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-[(1-methylethyl)imino]-3-(4-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



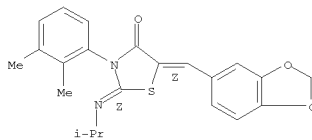
RN 854108-66-0 CAPLUS
 CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(4-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



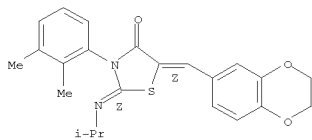
RN 854108-74-0 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-ylmethylene)-3-(2,3-dimethylphenyl)-2-[(1-methylethyl)imino]-], (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 854108-76-2 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2,3-dimethylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

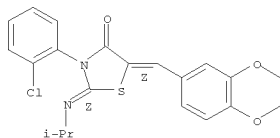


RN 854108-94-4 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-2-(hydroxymethyl)-1,4-benzodioxin-6-yl)methylene]-3-(2,3-dimethylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

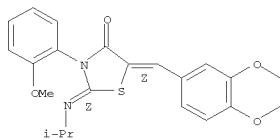
RN 854109-06-1 CAPLUS
CN 4-Thiazolidinone, 3-(2-chlorophenyl)-5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



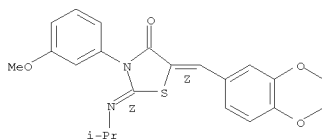
RN 854109-16-3 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2-methoxyphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



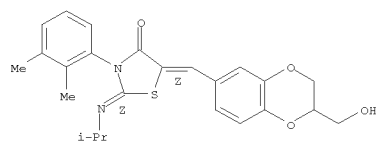
RN 854109-22-1 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(3-methoxyphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



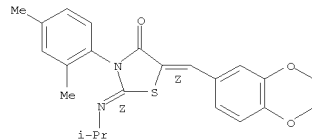
RN 854109-26-5 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(4-methoxyphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



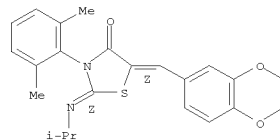
RN 854108-96-6 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2,4-dimethylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



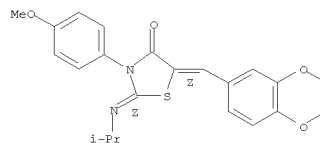
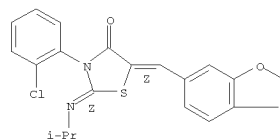
RN 854109-00-5 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2,6-dimethylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



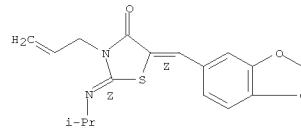
RN 854109-04-9 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-ylmethylene)-3-(2-chlorophenyl)-2-[(1-methylethyl)imino]-], (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



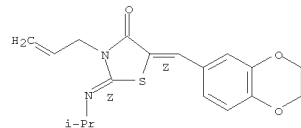
RN 854109-32-3 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-ylmethylene)-2-[(1-methylethyl)imino]-3-(2-propen-1-yl)-], (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



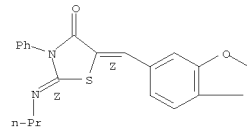
RN 854109-34-5 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(2-propen-1-yl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



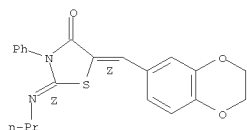
RN 854109-44-7 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-ylmethylene)-3-phenyl-2-(propylimino)-], (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



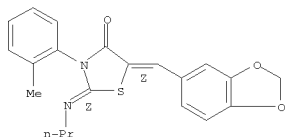
RN 854109-46-9 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-phenyl-2-(n-propylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



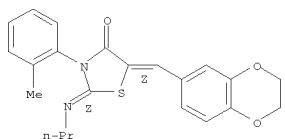
RN 854109-56-1 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-3-(2-methylphenyl)-2-(propylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



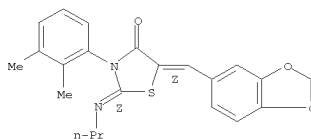
RN 854109-58-3 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2-methylphenyl)-2-(propylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



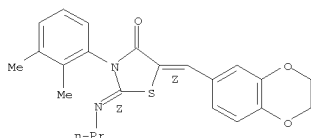
RN 854109-72-1 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-3-(2,3-dimethylphenyl)-2-(propylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



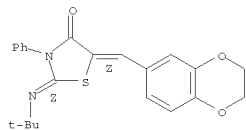
RN 854109-74-3 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2,3-dimethylphenyl)-2-(propylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



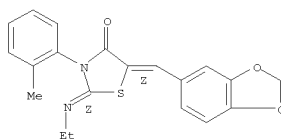
RN 854109-90-3 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1,1-dimethylethyl)imino]-3-phenyl-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

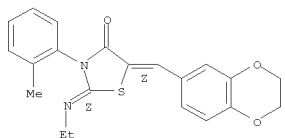


RN 854110-06-8 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-(ethylimino)-3-(2-methylphenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

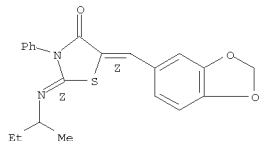


Double bond geometry as shown.



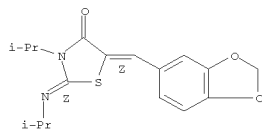
RN 854110-32-0 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-[(1-methylpropyl)imino]-3-phenyl-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



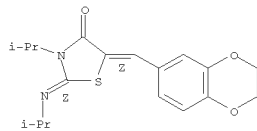
RN 854110-40-0 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-3-(1-methylethyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



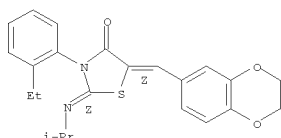
RN 854110-42-2 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(1-methylethyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



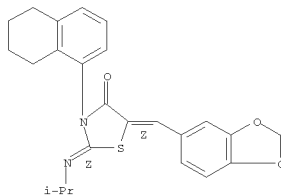
RN 854110-52-4 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2-ethylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



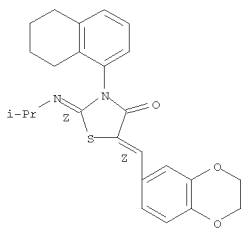
RN 854110-58-0 CAPLUS
CN 4-Thiazolidinone, 5-[(1,3-benzodioxol-5-yl)methylene]-2-[(1-methylethyl)imino]-3-(5,6,7,8-tetrahydro-1-naphthalenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



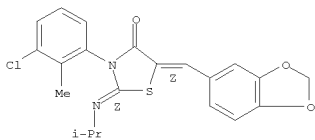
RN 854110-60-4 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-(5,6,7,8-tetrahydro-1-naphthalenyl)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



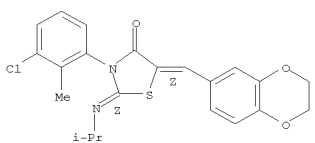
RN 854110-62-6 CAPLUS
CN 4-Thiazolidinone, 5-(1,3-benzodioxol-5-ylmethylene)-3-(3-chloro-2-methylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



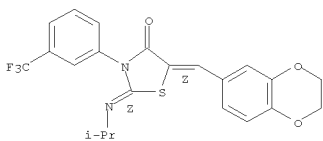
RN 854110-64-8 CAPLUS
CN 4-Thiazolidinone, 3-(3-chloro-2-methylphenyl)-5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



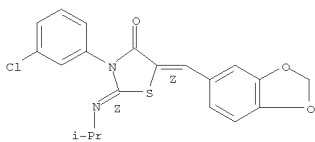
RN 854110-68-2 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(3-chloro-4-methylphenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



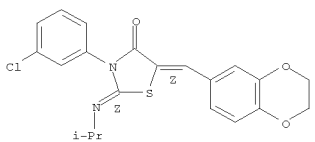
RN 854110-80-8 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(3-chlorophenyl)-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



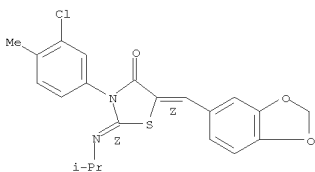
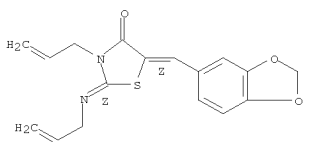
RN 854110-82-0 CAPLUS
CN 4-Thiazolidinone, 3-(3-chlorophenyl)-5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



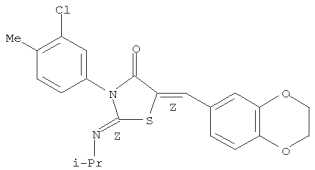
RN 854110-90-0 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2-propen-1-yl)-2-(2-propen-1-ylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



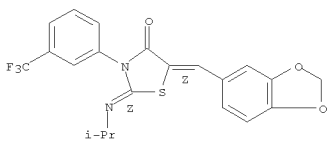
RN 854110-70-6 CAPLUS
CN 4-Thiazolidinone, 3-(3-chloro-4-methylphenyl)-5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 854110-74-0 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-[3-(trifluoromethyl)phenyl]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

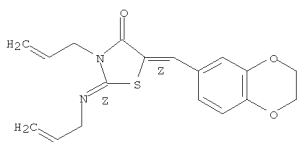


RN 854110-76-2 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-2-[(1-methylethyl)imino]-3-[3-(trifluoromethyl)phenyl]-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

RN 854110-92-2 CAPLUS
CN 4-Thiazolidinone, 5-[(2,3-dihydro-1,4-benzodioxin-6-yl)methylene]-3-(2-propen-1-yl)-2-(2-propen-1-ylimino)-, (2Z,5Z)- (CA INDEX NAME)

Double bond geometry as shown.

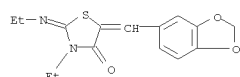


OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:442327 CAPLUS
DOCUMENT NUMBER: 144:102477
TITLE: Binding site of activators of the cystic fibrosis transmembrane conductance regulator in the nucleotide binding domains
AUTHOR(S): Moran, O.; Galletta, L. J. V.; Zegarra-Moran, O.
CORPORATE SOURCE: Istituto di Biofisica, CNR, Genoa, 16149, Italy
SOURCE: Cellular and Molecular Life Sciences (2005), 62 (4), 446-460
CODEN: CMLSFI; ISSN: 1420-682X
PUBLISHER: Birkhaeuser Verlag
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The use of substances that could activate the defective chloride channels of the mutant cystic fibrosis transmembrane conductance regulator (CFTR) has been suggested as possible therapy for cystic fibrosis. Using epithelia formed by cells stably transfected with wild-type or mutant (G551D, G1349D) CFTR, we estimated the apparent dissociation constant, KD, of a series of CFTR activators by measuring the increase in the apical membrane current. Modification of apparent KD of CFTR activators by mutations of the nucleotide-binding domains (NBDs) suggests that the binding site might be in these regions. The human NBD structure was predicted by homol. with murine NBD1. An NBD1-NBD2 complex was constructed by overlying monomers to a bacterial ABC transporter NBD dimer in the 'head-to-tail' conformation. Binding sites for CFTR activators were predicted by mol. docking. Comparison of theor. binding free energy estimated in the model to free energy estimated from the apparent dissociation consts., KD, resulted in a remarkably good correlation coefficient for one of the putative binding sites, located in the interface between NBD1 and NBD2.

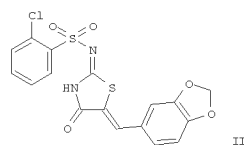
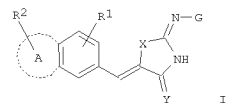
IT 361182-76-5
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(binding site of activators of the cystic fibrosis transmembrane conductance regulator in the nucleotide binding domains)
RN 361182-76-5 CAPLUS
CN 4-Thiazolidinone, 5-(1,3-benzodioxol-5-ylmethylene)-3-ethyl-2-(ethylimino)-(CA INDEX NAME)



OS.CITING REF COUNT: 40 THERE ARE 40 CAPLUS RECORDS THAT CITE THIS RECORD (40 CITINGS)
REFERENCE COUNT: 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:120737 CAPLUS
DOCUMENT NUMBER: 142:219270
TITLE: Preparation of 2-imino-4-(thio)oxo-5-polycyclovinyllazolines as PI3 kinase inhibitors
INVENTOR(S): Rueckle, Thomas; Shaw, Jeffrey; Church, Denis; Covini, David
PATENT ASSIGNEE(S): Applied Research Systems Ars Holding N.V., Neth.
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|------------|
| WO 2005011686 | A1 | 20050210 | WO 2004-EP51625 | 20040727 |
| W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| RW: | BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| AU 2004260836 | A1 | 20050210 | AU 2004-260836 | 20040727 |
| CA 2531140 | A1 | 20050210 | CA 2004-2531140 | 20040727 |
| EP 1648452 | A1 | 20060426 | EP 2004-766335 | 20040727 |
| EP 1648452 | B1 | 20090722 | | |
| R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | |
| JP 2007500171 | T | 20070111 | JP 2006-521581 | 20040727 |
| US 20070021447 | A1 | 20070125 | US 2004-565976 | 20040727 |
| ES 2328146 | T3 | 20091110 | ES 2004-766335 | 20040727 |
| NO 2006000573 | A | 20060203 | NO 2006-573 | 20060203 |
| PRIORITY APPLN. INFO.: | | | EP 2003-102313 | A 20030728 |
| | | | WO 2004-EP51625 | N 20040727 |
| ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT | | | | |
| OTHER SOURCE(S): CASREACT 142:219270; MARPAT 142:219270 | | | | |
| GI | | | | |



L4 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

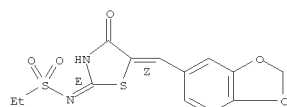
AB The title compds. I [A = 5-8 membered heterocyclic or carbocyclic group which may be fused with an aryl, heteroaryl, cycloalkyl or heterocycloalkyl; X = S, O, NR3, Y = S, O; R1 = H, CN, CO2H, acyl, etc.; R2 = H, halo, acyl, NH2, etc.; G = alkoxy, alkyl, CN, etc.; R3 = H, alkyl; with provisos], useful in particular for the treatment and/or prophylaxis of autoimmune disorders and/or inflammatory diseases, cardiovascular diseases, neurodegenerative diseases, kidney diseases, platelet aggregation, cancer, transplantation, graft rejection or lung injuries, were prepared and formulated. Thus, reacting 5-benzo[1,3]dioxol-5-ylmethylene-2-iminothiazolidin-4-one (preparation given) with 2-chlorobenzenesulfonyl chloride afforded 17% II. The tested compds. I showed IC50 of < 10 µM with regard to PI3Ky.

IT 1044645-30-8 1044645-32-0 1044645-33-1
1044645-34-2 1044645-38-6 1044645-40-0
1044645-41-1 1044645-42-2 1044645-45-5
1044645-48-8 1044645-49-9 1044645-51-3
1044645-55-7 1044645-56-8 1044645-57-9
1044645-58-0 1044645-62-6 1044645-63-7
1044645-65-9 1044645-66-0 1044645-70-6
1044645-72-8 1044645-73-9 1044645-77-3
1044645-78-4

RL: PREH (Prophetic)
(Preparation of 2-imino-4-(thio)oxo-5-polycyclovinyllazolines as PI3 kinase inhibitors)

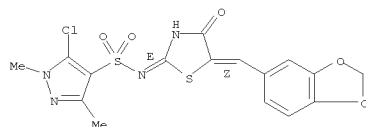
RN 1044645-30-8 CAPLUS
CN Ethanesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



RN 1044645-32-0 CAPLUS
CN 1H-Pyrazole-4-sulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-5-chloro-1,3-dimethyl-, [N(E)]- (CA INDEX NAME)

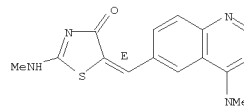
Double bond geometry as shown.



RN 1044645-33-1 CAPLUS
CN 4(5H)-Thiazolone, 5-[[4-(dimethylamino)-6-quinazolinyl]methylene]-2-(methylamino)-, (5E)- (CA INDEX NAME)

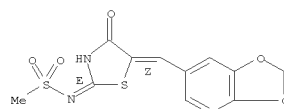
Double bond geometry as shown.

L4 ANSWER 31 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



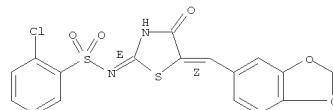
RN 1044645-34-2 CAPLUS
CN Methanesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



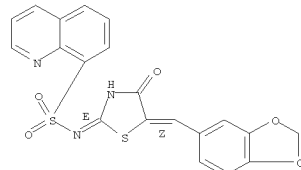
RN 1044645-38-6 CAPLUS
CN Benzenesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-2-chloro-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



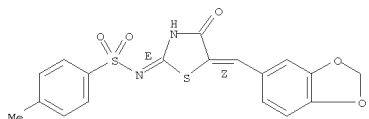
RN 1044645-40-0 CAPLUS
CN 8-Quinolinesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



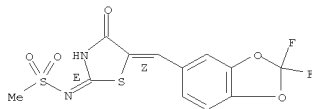
RN 1044645-41-1 CAPLUS
CN Benzenesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-4-methyl-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



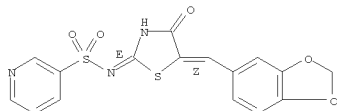
RN 1044645-42-2 CAPLUS
 CN Methanesulfonamide, N-[(5Z)-5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



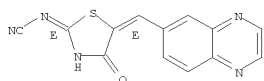
RN 1044645-45-5 CAPLUS
 CN 3-Pyridinesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



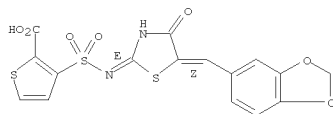
RN 1044645-48-8 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.



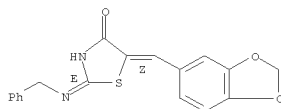
RN 1044645-49-9 CAPLUS
 CN 3-Pyridinesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-6-chloro-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



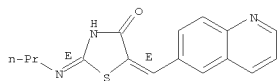
RN 1044645-58-0 CAPLUS
 CN 4-Thiazolidinone, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(phenylmethyl)imino]-, (2E,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



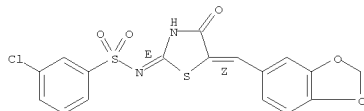
RN 1044645-62-6 CAPLUS
 CN 4-Thiazolidinone, 2-(propylimino)-5-(6-quinolinylmethylene)-, (2E,5E)- (CA INDEX NAME)

Double bond geometry as shown.



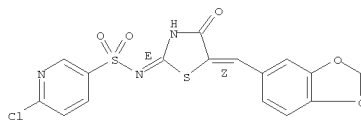
RN 1044645-63-7 CAPLUS
 CN Benzenesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-3-chloro-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



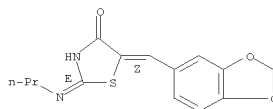
RN 1044645-65-9 CAPLUS
 CN 2-Thiophenecarboxylic acid, 3-[(E)-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]amino]sulfonyl]-, methyl ester (CA INDEX NAME)

Double bond geometry as shown.



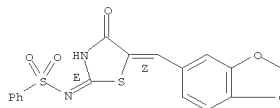
RN 1044645-51-3 CAPLUS
 CN 4-Thiazolidinone, 5-(1,3-benzodioxol-5-ylmethylene)-2-(propylimino)-, (2E,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



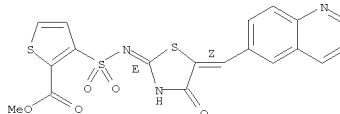
RN 1044645-55-7 CAPLUS
 CN Benzenesulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



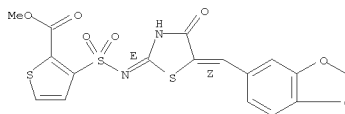
RN 1044645-56-8 CAPLUS
 CN 2-Thiophenecarboxylic acid, 3-[(E)-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]amino]sulfonyl]-, methyl ester (CA INDEX NAME)

Double bond geometry as shown.



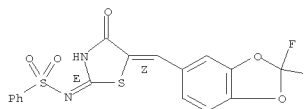
RN 1044645-57-9 CAPLUS
 CN 2-Thiophenecarboxylic acid, 3-[(E)-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]amino]sulfonyl]- (CA INDEX NAME)

Double bond geometry as shown.



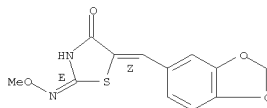
RN 1044645-66-0 CAPLUS
 CN Benzenesulfonamide, N-[(5Z)-5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



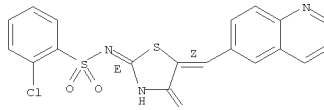
RN 1044645-70-6 CAPLUS
 CN 2,4-Thiazolidinedione, 5-(1,3-benzodioxol-5-ylmethylene)-, 2-(O-methyloxime)-, (2E,5Z)- (CA INDEX NAME)

Double bond geometry as shown.



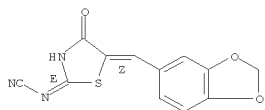
RN 1044645-72-8 CAPLUS
 CN Benzenesulfonamide, 2-chloro-N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



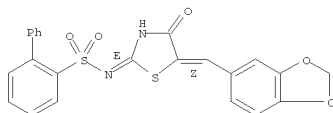
RN 1044645-73-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

Double bond geometry as shown.



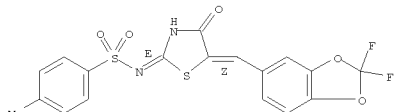
RN 1044645-77-3 CAPLUS
CN [1,1'-biphenyl]-2-sulfonamide, N-[(5Z)-5-(1,3-benzodioxol-5-ylmethylene)-4-oxo-2-thiazolidinylidene]-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



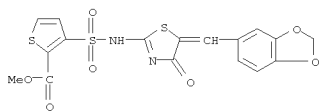
RN 1044645-78-4 CAPLUS
CN Benzenesulfonamide, N-[(5Z)-5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4-oxo-2-thiazolidinylidene]-4-methyl-, [N(E)]- (CA INDEX NAME)

Double bond geometry as shown.



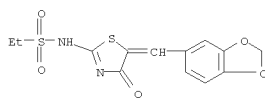
IT 843641-13-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of 2-imino-4-(thio)oxo-5-polycyclovinyllazolines as PI3 kinase inhibitors)

RN 843641-13-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]amino]sulfonyl]-, methyl ester (CA INDEX NAME)

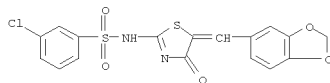


IT 176529-68-3P 326093-91-8P 419552-35-5P

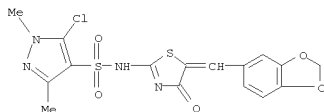
RN 843641-10-1 CAPLUS
CN Ethanesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



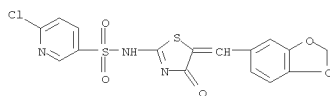
RN 843641-11-2 CAPLUS
CN Benzenesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-3-chloro- (CA INDEX NAME)



RN 843641-12-3 CAPLUS
CN 1H-Pyrazole-4-sulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-5-chloro-1,3-dimethyl- (CA INDEX NAME)



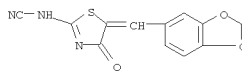
RN 843641-14-5 CAPLUS
CN 3-Pyridinesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-6-chloro- (CA INDEX NAME)



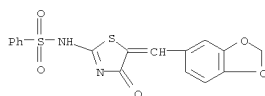
RN 843641-15-6 CAPLUS
CN 8-Quinolinesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)

843641-09-8P 843641-10-1P 843641-11-2P
843641-12-3P 843641-14-5P 843641-15-6P
843641-16-7P 843641-17-8P 843641-18-9P
843641-19-0P 843641-20-3P 843641-21-4P
843641-22-5P 843641-23-6P 843641-24-7P
843641-25-8P 843641-26-9P 843641-27-0P
843641-28-1P 843641-29-2P 843641-30-5P
888948-67-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 2-imino-4-(thio)oxo-5-polycyclovinyllazolines as PI3 kinase inhibitors)

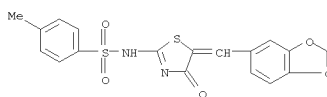
RN 176529-68-3 CAPLUS
CN Cyanamide, [5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)



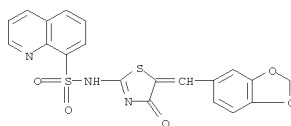
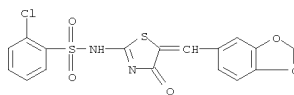
RN 326093-91-8 CAPLUS
CN Benzenesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



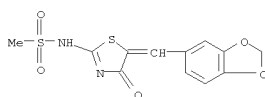
RN 419552-35-5 CAPLUS
CN Benzenesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-4-methyl- (CA INDEX NAME)



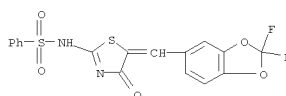
RN 843641-09-8 CAPLUS
CN Benzenesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-2-chloro- (CA INDEX NAME)



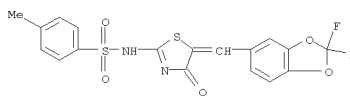
RN 843641-16-7 CAPLUS
CN Methanesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



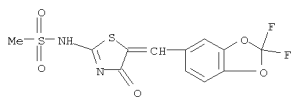
RN 843641-17-8 CAPLUS
CN Benzenesulfonamide, N-[5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



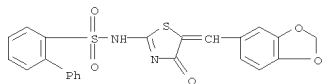
RN 843641-18-9 CAPLUS
CN Benzenesulfonamide, N-[5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]-4-methyl- (CA INDEX NAME)



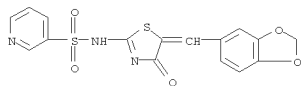
RN 843641-19-0 CAPLUS
CN Methanesulfonamide, N-[5-[(2,2-difluoro-1,3-benzodioxol-5-yl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



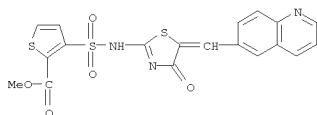
RN 843641-20-3 CAPLUS
CN [1,1'-Biphenyl]-2-sulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



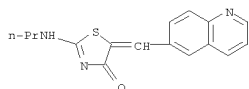
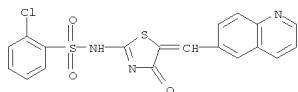
RN 843641-21-4 CAPLUS
CN 3-Pyridinesulfonamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



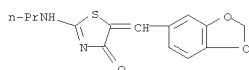
RN 843641-22-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]amino]sulfonyl]-, methyl ester (CA INDEX NAME)



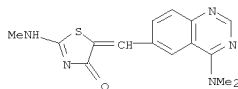
RN 843641-23-6 CAPLUS
CN Benzenesulfonamide, 2-chloro-N-[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]- (CA INDEX NAME)



RN 843641-30-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(1,3-benzodioxol-5-ylmethylene)-2-(propylamino)-] (CA INDEX NAME)

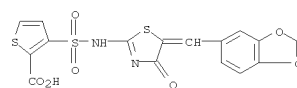


RN 888948-67-2 CAPLUS
CN 4(5H)-Thiazolone, 5-[[[4-(dimethylamino)-6-quinazolinyl]methylene]-2-(methylamino)-] (CA INDEX NAME)

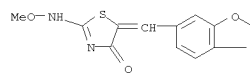


OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

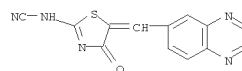
RN 843641-24-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 3-[[[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]amino]sulfonyl]- (CA INDEX NAME)



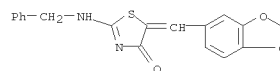
RN 843641-25-8 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-(methoxyamino)- (CA INDEX NAME)



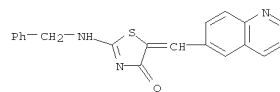
RN 843641-26-9 CAPLUS
CN Cyanamide, [4,5-dihydro-4-oxo-5-(6-quinoxalinylmethylene)-2-thiazolyl]- (9CI) (CA INDEX NAME)



RN 843641-27-0 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(phenylmethyl)amino]- (CA INDEX NAME)



RN 843641-28-1 CAPLUS
CN 4(5H)-Thiazolone, 2-[(phenylmethyl)amino]-5-(6-quinolinylmethylene)- (CA INDEX NAME)



RN 843641-29-2 CAPLUS
CN 4(5H)-Thiazolone, 2-(propylamino)-5-(6-quinolinylmethylene)- (CA INDEX NAME)

ACCESSION NUMBER: 2004:964678 CAPLUS
DOCUMENT NUMBER: 141:417965
TITLE: Sensitizing dye and photosensitive composition for lithographic printing plate
Shibuya, Akinori
INVENTOR(S): Fuji Photo Film Co., Ltd., Japan
PATENT ASSIGNEE(S): U.S. Pat. Appl. Publ., 32 pp.
SOURCE: CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

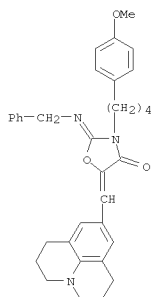
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|----------------|------|----------|-----------------|----------|
| US 20040224257 | A1 | 20041111 | US 2004-838316 | 20040505 |
| US 7169529 | B2 | 20070130 | | |
| JP 2004331880 | A | 20041125 | JP 2003-131847 | 20030509 |
| JP 4469561 | B2 | 20100526 | | |
| EP 1491536 | A1 | 20041229 | EP 2004-10971 | 20040507 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR
PRIORITY APPLN. INFO.: JP 2003-131847 A 20030509
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:417965

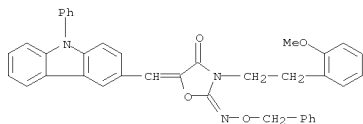
AB A photo-sensitive composition for lithog. printing plate comprises (i) the novel compound as a sensitizing dye, (ii) an activator compound generating at least one of a radical and an acid by interacting the activator compound with light absorption of the sensitizing dye to cause chemical change, and (iii) a compound changing its phys. or chemical property irreversibly by a reaction with at least one of the radical and the acid. The object of the present invention is to provide a photosensitive composition having high sensitivity to the wavelength over a wide range 350-450 nm, high press life and good compatibility and being suited for a lithog. printing plate precursor to the oscillation wavelength of a short-wave semiconductor laser and thereby obtain a lithog. printing plate or the like for scanning exposure, which is ensured with excellent workability, high profitability and good suitability for CTP system.

IT 791806-48-9 791806-55-8
RL: TEM (Technical or engineered material use); USES (Uses)
(sensitizing dye; sensitizing dye and photosensitive composition for lithog. printing plate)

RN 791806-48-9 CAPLUS
CN 4-Oxazolidinone, 3-[4-(4-methoxyphenyl)butyl]-2-[(phenylmethyl)imino]-5-[(2,3,6,7-tetrahydro-1H,5H-benzo[ij]quinolizin-9-yl)methylene]- (CA INDEX NAME)



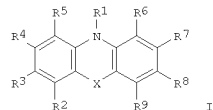
RN 791806-55-8 CAPLUS
 CN 2,4-Oxazolidinedione, 3-[2-(2-methoxyphenyl)ethyl]-5-[(9-phenyl-9H-carbazol-3-yl)methylene]-, 2-[O-(phenylmethyl)oxime] (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (2 CITINGS)
 REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2004:898945 CAPLUS
 DOCUMENT NUMBER: 141:386405
 TITLE: Photosensitive composition for making lithographic
 printing plate
 INVENTOR(S): Ishiji, Yohei; Shibuya, Akinori
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 53 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

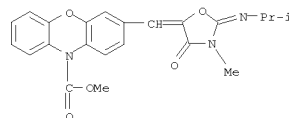
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-------------------|----------|
| JP 2004302207 | A | 20041028 | JP 2003-95901 | 20030331 |
| PRIORITY APPLN. INFO.: | | | JP 2003-95901 | 20030331 |
| OTHER SOURCE(S): | | | MARPAT 141:386405 | |



AB Title composition comprises (1) sensitizing dye I (X = O, S, bivalent non-metal group, R1-9 = H, monovalent non-metal group), (2) an activating agent, (3) ethylenic compds. which can undergo addition polymerization under radical or acidic conditions.

IT 782499-94-9
 RL: MCA (Modifier or additive use); USES (Uses)
 (photosensitive composition containing sensitizing dyes for making lithog. printing plate)

RN 782499-94-9 CAPLUS
 CN 10H-Phenoxazine-10-carboxylic acid,
 3-[[3-methyl-2-[(1-methylethyl)imino]-4-oxo-5-oxazolidinylidene]methyl]-, methyl ester (CA INDEX NAME)



L4 ANSWER 34 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
 ACCESSION NUMBER: 2004:876843 CAPLUS
 DOCUMENT NUMBER: 141:372807
 TITLE: Light-sensitive material compositions for lithographic
 printing plate precursors
 INVENTOR(S): Shibuya, Akinori
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 87 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

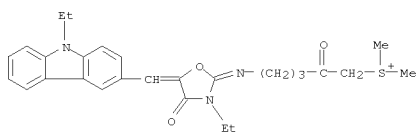
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-------------------|----------|
| JP 2004295012 | A | 20041021 | JP 2003-90715 | 20030328 |
| PRIORITY APPLN. INFO.: | | | JP 2003-90715 | 20030328 |
| OTHER SOURCE(S): | | | MARPAT 141:372807 | |

AB The title composition contains a photosensitizing dye, and a light-sensitive radical-, acid-, or base-generator, and compds. irreversibly changing the phys. properties by reacting with the generated acid, radical, or base, wherein the photosensitizing dye has general structure Dye-L-M(Dye = main photosensitizing dye group; L = 2-valent connecting organic group; M = acceptor having lower reduction potential than the oxidation potential of Dye). The composition shows high sensitivity toward laser beam generated by inexpensive semiconductor laser apparatus and good handling under light and provides printing plates of high printing durability.

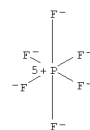
IT 778610-65-4P
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (photosensitizing dye in light-sensitive material compns.)

RN 778610-65-4 CAPLUS
 CN Sulfonium, [5-[[[3-ethyl-5-[(9-ethyl-9H-carbazol-3-yl)methylene]-4-oxo-2-oxazolidinylidene]amino]-2-oxopentyl]dimethyl-, hexafluorophosphate(1-)(1:1) (CA INDEX NAME)

CM 1
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 CMF C27 H32 N3 O3 S



CM 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS

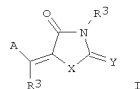


L4 ANSWER 35 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:802416 CAPLUS
DOCUMENT NUMBER: 141:322604
TITLE: Photosensitive composition containing novel sensitizer
dyes for light-sensitive lithographic printing plate
precursors
INVENTOR(S): Shibuya, Akinori
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan; Fujifilm Corporation
SOURCE: U.S. Pat. Appl. Publ., 52 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------|------|----------|------------------|----------|
| US 20040191679 | A1 | 20040930 | US 2004-813136 | 20040331 |
| US 7267925 | B2 | 20070911 | | |
| JP 2004318049 | A | 20041111 | JP 2003-311253 | 20030903 |
| JP 4570857 | B2 | 20101027 | | |
| CN 1534379 | A | 20041006 | CN 2004-10031934 | 20040331 |
| CN 100529963 | C | 20090819 | | |
| EP 1471387 | A2 | 20041027 | EP 2004-7802 | 20040331 |
| EP 1471387 | A3 | 20050112 | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK
PRIORITY APPLN. INFO.: JP 2003-96765 A 20030331
JP 2003-311253 A 20030903

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:322604
GI



AB The invention relates to a photosensitive composition containing: a sensitizing dye represented by the formula I (A = aromatic ring, heterocyclic ring; X = O, S; Y = O, -N(R1)-; R1-3 = H, mono-valent nonmetallic atomic group); an initiator compound capable of generating a radical, an acid, or a base; and a compound whose phys. or chemical characteristic irreversibly changes by at least one of a radical, an acid, and a base. The composition is suitable for light-sensitive lithog. printing plate precursors.

IT 766515-10-0
RL: TEM (Technical or engineered material use); USES (Uses)
(dye in photosensitive composition)

RN 766515-10-0 CAPLUS

CN 4-Oxazolidinone, 3-ethyl-5-[(9-ethyl-9H-carbazol-3-yl)methylene]-2-[(phenylmethyl)imino]- (CA INDEX NAME)

L4 ANSWER 36 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:467698 CAPLUS
DOCUMENT NUMBER: 141:38601
TITLE: Preparation of thiazolidinones for inhibiting HYAK3
INVENTOR(S): Hasegawa, Masachir; Tang, Jun; Sato, Hideyuki
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2

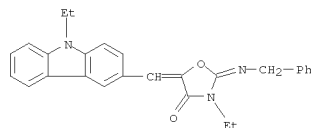
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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|---------------|------|----------|-----------------|----------|
| WO 2004047760 | A2 | 20040610 | WO 2003-US37658 | 20031118 |
| WO 2004047760 | A3 | 20041021 | | |

W: AE, AG, AL, AU, BA, BB, BR, BZ, CA, CN, CO, CR, CU, DM, DZ, EC, EG, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, OM, PH, PL, RO, SC, SG, TN, TT, UA, US, UZ, VN, YU, ZA
RW: BW, GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
CA 2507256 A1 20040610 CA 2003-2507256 20031118
AU 2003298693 A1 20040618 AU 2003-298693 20031118
AU 2003298693 B2 20100930
EP 1567112 A2 20050831 EP 2003-796448 20031118
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JP 2006509765 T 20060323 JP 2004-555721 20031118
NZ 539873 A 20080926 NZ 2003-539873 20031118
AT 411302 T 20081015 AT 2003-796448 20031118
PT 1567112 E 20090108 PT 2003-796448 20031118
ES 2315566 T3 20090401 ES 2003-796448 20031118
AP 1967 A 20090430 AP 2005-3304 20031118
TW 309648 B 20090511 TW 2003-132476 20031120
IN 2005DN02002 A 20070202 IN 2005-DN2002 20050511
IN 219563 A1 20080627
MX 2005005406 A 20050803 MX 2005-5406 20050520
NO 2005002928 A 20050817 NO 2005-2928 20050615
HK 1083443 A1 20090710 HK 2006-102181 20060217
US 20060293338 A1 20061228 US 2006-535690 20060410
US 7767701 B2 20100803

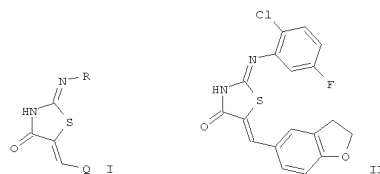
PRIORITY APPLN. INFO.: US 2002-428384P P 20021122
WO 2003-US37658 W 20031118
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 141:38601
GI

L4 ANSWER 35 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



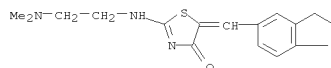
AB This invention relates to newly identified compds. I [R = cycloalkyl, naphthyl, (un)substituted Ph, etc.; Q = quinolinyl, dihydrobenzofuranyl, benzodioxanyl, etc.] for inhibiting HYAK3 proteins and methods for treating diseases associated with the imbalance or inappropriate activity of HYAK3 proteins such as anemia. E.g., a 3-step synthesis of II, starting from 2-chloro-5-fluoroaniline, was given. The compds. I have valuable pharmacol. properties due to their ability to inhibit the HYAK3 kinase as demonstrated by data given for the representative compds. I.

IT 701293-74-5P 701293-76-7P 701293-78-9P
701293-80-3P 701293-81-4P 701293-82-5P
701294-17-9P 701294-18-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

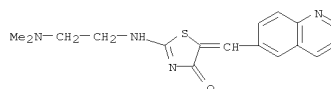
RN 701293-74-5 CAPLUS

CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[[2-(dimethylamino)ethyl]amino]- (CA INDEX NAME)



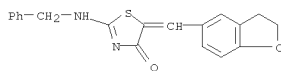
RN 701293-76-7 CAPLUS

CN 4(5H)-Thiazolone, 2-[[2-(dimethylamino)ethyl]amino]-5-(6-quinolinylmethylene)- (CA INDEX NAME)

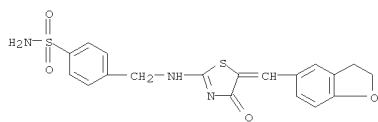


RN 701293-78-9 CAPLUS

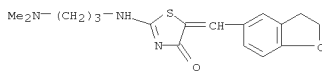
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[(phenylmethyl)amino]- (CA INDEX NAME)



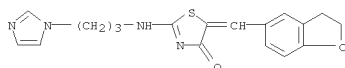
RN 701293-80-3 CAPLUS
CN Benzenesulfonamide, 4-[[5-[(2,3-dihydro-5-benzofuranyl)methylene]-4,5-dihydro-4-oxo-2-thiazolyl]amino]methyl]- (CA INDEX NAME)



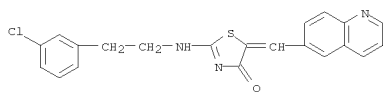
RN 701293-81-4 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[[3-(dimethylamino)propyl]amino]- (CA INDEX NAME)



RN 701293-82-5 CAPLUS
CN 4(5H)-Thiazolone, 5-[(2,3-dihydro-5-benzofuranyl)methylene]-2-[[3-(1H-imidazol-1-yl)propyl]amino]- (CA INDEX NAME)



RN 701294-17-9 CAPLUS
CN 4(5H)-Thiazolone, 2-[[2-(3-chlorophenyl)ethyl]amino]-5-(6-quinolinylmethylene)- (CA INDEX NAME)



RN 701294-18-0 CAPLUS
CN Benzenesulfonamide, 4-[2-[[4,5-dihydro-4-oxo-5-(6-quinolinylmethylene)-2-thiazolyl]amino]ethyl]- (CA INDEX NAME)

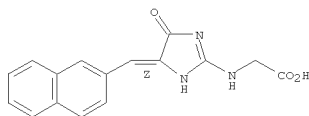
ACCESSION NUMBER: 2003:215891 CAPLUS
DOCUMENT NUMBER: 139:62612
TITLE: Structure and activity studies of glycine receptor ligands. Part 8. Arylidene-imidazoline-4-one amino acids
AUTHOR(S): Karolak-Wojciechowska, Janina; Mrozek, Agnieszka; Kiec-Kononowicz, Katarzyna; Handzlik, Jadwiga
CORPORATE SOURCE: Institute of General and Ecological Chemistry, Technical University of Lodz, Lodz, 90-924, Pol.
SOURCE: Journal of Molecular Structure (2003), 649(1-2), 25-36
CODEN: JMOSB4; ISSN: 0022-2860
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Based on chemical and preliminary biol. expts. (inhibition to glycine receptor), structure and activity relation of arylidene-imidazoline-4-one amino acids has been studied. In the course of our work, the simulation of the hydrogen bonds formation between ligand mol. and hypothetical receptor has been designed. Computed interactions are going to simulate possible ligand-receptor interaction with selected amino acids (in this investigation-with basic lysine and acidic aspartic acid). Obtained model ests. roughly the binding energy of the amino acids with ligand mols. The proposed amino acids binding energies approx. agree with activity of the isomeric benzylidene-imidazoline-4-one glycines and α -alanines which decreases in the order of m-Cl>p-Cl>o-Cl substituents in benzylidene moiety. Addnl., the lowering of activity is caused by lipophilic pocket volume

IT 550348-15-7P
RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(structure and activity studies of glycine receptor ligands)

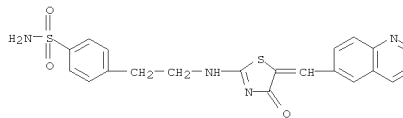
RN 550348-15-7 CAPLUS
CN Glycine, N-[(4Z)-4,5-dihydro-4-(2-naphthalenylmethylene)-5-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)

Double bond geometry as shown.



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

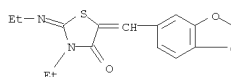


OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

ACCESSION NUMBER: 2002:742984 CAPLUS
DOCUMENT NUMBER: 138:313909
TITLE: High-affinity Activators of Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) Chloride Conductance Identified by High-Throughput Screening
AUTHOR(S): Ma, Tonghui; Vetrivel, L.; Yang, Hong; Pedemonte, Nicoletta; Zegarra-Moran, Olga; Galletta, Luis J. V.; Verkman, A. S.
CORPORATE SOURCE: Departments of Medicine and Physiology, Cardiovascular Research Institute, University of California, San Francisco, CA, 94143-0521, USA
SOURCE: Journal of Biological Chemistry (2002), 277(40), 37235-37241
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English

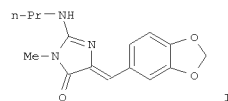
AB Cystic fibrosis (CF) is caused by mutations in the CF transmembrane conductance regulator (CFTR) protein that reduce cAMP-stimulated Cl⁻ conductance in airway and other epithelia. The purpose of this investigation was to identify new classes of potent CFTR activators. A collection of 60,000 diverse drug-like compds. was screened at 10 μ M together with a low concentration of forskolin (0.5 μ M) in Fisher rat thyroid epithelial cells co-expressing human CFTR and a green fluorescent protein-based Cl⁻ sensor. Primary screening yielded 57 strong activators (greater activity than reference compound apigenin), most of which were unrelated in chemical structure to known CFTR activators, and 284 weaker activators. Secondary anal. of the strong activators included anal. of CFTR specificity, forskolin requirement, transepithelial short-circuit current, activation kinetics, dose response, toxicity, and activation mechanism. Three compds., the most potent being a dihydroisoquinoline, activated CFTR by elevating cellular cAMP, probably by phosphodiesterase inhibition. Fourteen compds. activated CFTR without cAMP elevation or phosphatase inhibition, suggesting direct CFTR interaction. The most potent compds. had tetrahydrocarbazol, hydroxycoumarin, and thiazolidine core structures. These compds. induced CFTR Cl⁻ currents rapidly (<5 min) with Kd down to 200 nM and were CFTR-selective, reversible, and nontoxic. Several compds., the most potent being a trifluoromethylphenylbenzamine, activated the CF-causing mutant G551D, but with much weaker affinity (Kd > 10 μ M). When added for 10 min, none of the compds. activated Δ Ph508-CFTR in transfected cells grown at 37 $^{\circ}$ (with Δ Ph508-CFTR trapped in the endoplasmic reticulum). However, after correction of trafficking by 48 h of growth at 27 $^{\circ}$, tetrahydrocarbazol and N-phenyltriazine derivs. strongly stimulated Cl⁻ conductance with Kd < 1 μ M. The new activators identified here may be useful in defining mol. mechanisms of CFTR activation and as lead compds. in CF drug development.

IT 361182-76-5
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(high-affinity activators of cystic fibrosis transmembrane conductance regulator (CFTR) chloride conductance identified by high-throughput screening)
RN 361182-76-5 CAPLUS
CN 4-Thiazolidinone, 5-(1,3-benzodioxol-5-ylmethylene)-3-ethyl-2-(ethylimino)- (CA INDEX NAME)



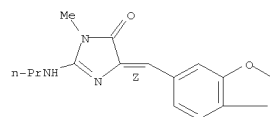
L4 ANSWER 38 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
OS.CITING REF COUNT: 100 THERE ARE 100 CAPLUS RECORDS THAT CITE THIS
RECORD (100 CITINGS)
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2002:303968 CAPLUS
DOCUMENT NUMBER: 137:185708
TITLE: Microwave-mediated solventless synthesis of new
derivatives of marine alkaloid Leucettamine B
AUTHOR(S): Cherouvrier, Jean-Rene; Carreaux, Francois; Bazureau,
Jean Pierre
CORPORATE SOURCE: Institut de Chimie, Synthese
& Electrosynthese
SOURCE: Organiques 3, UMR 6510, Universite Rennes 1, Rennes,
35042, Fr.
Tetrahedron Letters (2002), 43(19), 3581-3584
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 137:185708
GI



AB New access to N-alkyl derivs., e.g. I, of the marine alkaloid Leucettamine
B are described using two three-step convergent routes. For the formation
of the 2-amino imidazolone ring, the key steps involve solvent-free
condensations under microwaves and guanylation reactions with
non-sterically hindered primary amines.
IT 451455-66-6P 451455-67-7P 451455-68-8P
451455-69-9P 451455-70-2P 451455-72-4P
451455-73-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(microwave-mediated solventless synthesis of leucettamine B derivs.)
RN 451455-66-6 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-
2-(propylamino)-, (5Z)- (CA INDEX NAME)

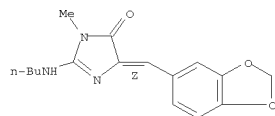
Double bond geometry as shown.



RN 451455-67-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(butylamino)-3,5-
dihydro-3-methyl-, (5Z)- (CA INDEX NAME)

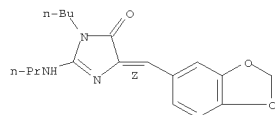
Double bond geometry as shown.

L4 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



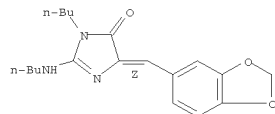
RN 451455-68-8 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-3,5-dihydro-2-
(propylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



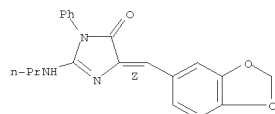
RN 451455-69-9 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3-butyl-2-
(butylamino)-3,5-dihydro-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



RN 451455-70-2 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-phenyl-
2-(propylamino)-, (5Z)- (CA INDEX NAME)

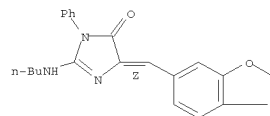
Double bond geometry as shown.



RN 451455-72-4 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-2-(butylamino)-3,5-
dihydro-3-phenyl-, (5Z)- (CA INDEX NAME)

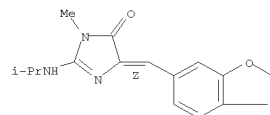
Double bond geometry as shown.

L4 ANSWER 39 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



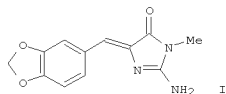
RN 451455-73-5 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-
2-[(1-methylethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.



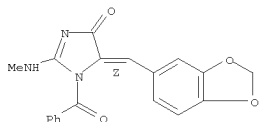
OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS
RECORD (17 CITINGS)
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1999:798095 CAPLUS
DOCUMENT NUMBER: 132:152009
TITLE: Synthesis of the marine alkaloid leucettamine B
AUTHOR(S): Roue, Nathalie; Bergman, Jan
CORPORATE SOURCE: Unit of Organic Chemistry, Department of Biosciences
at Novum, Huddinge, SE-14157, Swed.
SOURCE: Tetrahedron (1999), 55(51), 14729-14738
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:152009
GI



AB The marine natural product leucettamine B (I) has been prepared in good yield via two different routes, starting with glycine or with 3-Me thiohydantoin, involving simple aldol condensation with piperonal, and finally transamination of the thiohydantoin derivative
IT 257869-48-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of the marine alkaloid leucettamine B)
RN 257869-48-0 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-1-benzoyl-1,5-dihydro-2-(methylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

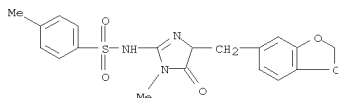


IT 257869-46-8P 257869-53-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of the marine alkaloid leucettamine B)
RN 257869-46-8 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-2-(methylamino)-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

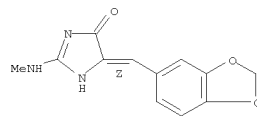
L4 ANSWER 41 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1999:163657 CAPLUS
DOCUMENT NUMBER: 130:325282
TITLE: Synthesis of Marine Alkaloids Isonaamine A, Dorimidazole A, and Preclathridine A. Iminophosphorane-Mediated Preparation of 2-Amino-1,4-disubstituted Imidazoles from α -Azido Esters
AUTHOR(S): Molina, Pedro; Fresneda, Pilar M.; Sanz, Miguel A.
CORPORATE SOURCE: Departamento de Química Organica Facultad de Química, Universidad de Murcia, Murcia, E-30071, Spain
SOURCE: Journal of Organic Chemistry (1999), 64(7), 2540-2544
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:325282

AB The preparation of 2-amino-1,5-disubstituted imidazoles from α -azido esters was achieved. The aza-Wittig reaction of the iminophosphorane derivs. with tosyl isocyanate, reaction with primary amines yielded the appropriately substituted 2-aminoimidazolinone ring followed by DIBAL reduction, methanesulfonyl chloride dehydration and N-tosyl deprotection afforded the title alkaloids. The key step was the Staudinger/aza-Wittig/carbodiimide-mediated cyclization of a novel guanidine precursor that yielded the appropriately substituted imidazole ring.
IT 223757-37-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of isonaamine A, dorimidazole A, and preclathridine A via iminophosphorane mediated approach)
RN 223757-37-7 CAPLUS
CN Benzenesulfonamide, N-[4-(1,3-benzodioxol-5-ylmethyl)-4,5-dihydro-1-methyl-5-oxo-1H-imidazol-2-yl]-4-methyl- (CA INDEX NAME)



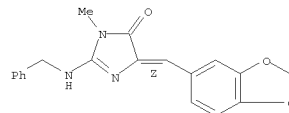
OS.CITING REF COUNT: 35 THERE ARE 35 CAPLUS RECORDS THAT CITE THIS RECORD (36 CITINGS)
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



RN 257869-53-7 CAPLUS
CN 4H-Imidazol-4-one, 5-(1,3-benzodioxol-5-ylmethylene)-3,5-dihydro-3-methyl-2-[(phenylmethyl)amino]-, (5Z)- (CA INDEX NAME)

Double bond geometry as shown.

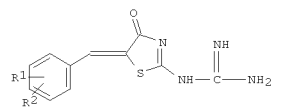


OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)
REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1997:648537 CAPLUS
DOCUMENT NUMBER: 127:307379
ORIGINAL REFERENCE NO.: 127:60121a
TITLE: Preparation of benzylidenes as antiallergy agents
INVENTOR(S): Kubo, Junichi; Yonemura, Keiji; Mukai, Mizue
PATENT ASSIGNEE(S): Hisamitsu Pharmaceutical Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

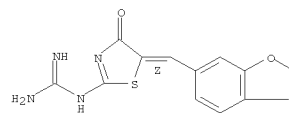
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|-------------------|-----------------|----------|
| JP 09255669 | A | 19970930 | JP 1996-103104 | 19960322 |
| PRIORITY APPLN. INFO.: | | | JP 1996-103104 | 19960322 |
| OTHER SOURCE(S): | | MARPAT 127:307379 | | |

GI



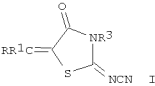
AB Benzylidenes I [R1, R2 = H, halo, lower (halo)alkyl, lower alkoxy, OH, lower alkoxy carbonyl, lower alkyl carbonyloxy, lower alkoxy carbonylalkenyl; R1 and R2 may form (O-substituted) lower alkylene] or their salts, useful for treatment of immediate-type and delayed-type allergy and autoimmune diseases (e.g. chronic rheumatoid arthritis), are prepared. Refluxing guanlythiourea with Et chloroacetate in EtOH for 3 h gave 70% N-(4,5-dihydro-4-oxo-2-thiazolyl)guanidine.HCl, which was treated with PhCHO and AcONa at 80° for 1 h in AcOH to afford 43% I (R1 = R2 = H).
IT 197441-47-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzylidenes for treatment of allergy and autoimmune diseases)
RN 197441-47-7 CAPLUS
CN Guanidine, [5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

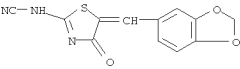


L4 ANSWER 43 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1996:298393 CAPLUS
DOCUMENT NUMBER: 124:343290
ORIGINAL REFERENCE NO.: 124:63763a,63766a
TITLE: Preparation of
5-alkylidene-2-(N-cyanoimino)thiazolidin-4-ones as
aldose reductase inhibitors
INVENTOR(S): Fumio, Yoneda; Mayumi, Watanabe; Masatoshi, Sakae;
Masanori, Katurada; Takaaki, Sabato
PATENT ASSIGNEE(S): Fujimoto Pharmaceutical Co, Ltd, Japan
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--|----------|-----------------|------------|
| EP 697410 | A1 | 19960221 | EP 1995-304416 | 19950623 |
| EP 697410 | B1 | 20021106 | | |
| R: BE, DE, FR, GB, IT, SE | | | | |
| JP 08041040 | A | 19960213 | JP 1994-209067 | 19940729 |
| JP 3871354 | B2 | 20070124 | | |
| US 5750712 | A | 19980512 | US 1995-493152 | 19950621 |
| PRIORITY APPLN. INFO.: | | | JP 1994-209067 | A 19940729 |
| ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT | | | | |
| OTHER SOURCE(S): | CASREACT 124:343290; MARPAT 124:343290 | | | |
| GI | | | | |



AB Title compds. [I; R = (Z)-R2(CH:CR1)n][II; each R1 independently = H or alkyl; R2 = (un)substituted Ph, naphthyl; R3 = H, alkyl, CH2CO2R4; R4 = H or alkyl; n = 0 or 1] were prepared. Thus, 2-(N-cyanoimino)thiazolidin-4-one K salt was condensed with vanillin to give II (R1 = R3 = H, R2 = 4-hydroxy-3-methoxyphenyl, n = 0) which gave 100% inhibition of aldose reductase at 1.0x10-7M in vitro.
IT 176529-68-3P 176529-69-4P 176529-72-9P
176529-79-6P
R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 5-alkylidene-2-(N-cyanoimino)thiazolidin-4-ones as aldose reductase inhibitors)
RN 176529-68-3 CAPLUS
CN Cyanamide, [5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

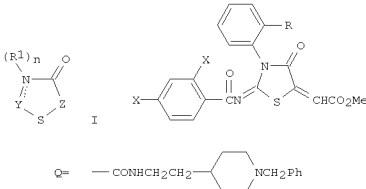


RN 176529-69-4 CAPLUS
CN Cyanamide, [4,5-dihydro-5-(2-naphthalenylmethylene)-4-oxo-2-thiazolyl]-

L4 ANSWER 44 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1996:130808 CAPLUS
DOCUMENT NUMBER: 124:176081
ORIGINAL REFERENCE NO.: 124:32655a,32658a
TITLE: Preparation of 1,3-thiazolidin-4-one derivatives and analogs as thrombin receptor antagonists
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

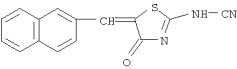
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| JP 07285952 | A | 19951031 | JP 1995-67197 | 19950327 |
| PRIORITY APPLN. INFO.: | | | GB 1994-7018 | A 19940408 |
| | | | GB 1994-17443 | A 19940830 |

OTHER SOURCE(S): MARPAT 124:176081
GI

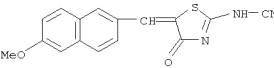


AB The title compds. [I; R1 = lower alkyl, aryl-lower alkyl, lower cycloalkyl, heterocyclyl, acylheterocyclyl, (un)substituted aryl; Y = R2-W: C, R3R4NC, CO; wherein R2 = acyl; W = N, CH; R3 = acyl; R4 = aryl; Z = C:CHR5, CHR7; wherein R5 = (un)protected CO2H, (un)protected amino-lower alkoxy-carbonyl, acyl, (un)substituted aryl, heterocyclyloxy; R7 = H, (un)protected carboxy-lower alkyl; n = 0,1], useful for the treatment of the thrombin receptor-mediated diseases, e.g. thrombotic diseases, angina pectoris, heart disorder after implantation of a heart pace maker, valvular heart disease after replacement of an artificial heart vulvae, lung infarction, Raynaud syndrome, nephritis, inflammation, and arteriosclerosis, are prepared. Thus, 0.29 mL di-Me butyrdioate was added to a suspension of 0.50 g 1-benzoyl-3-phenylthiourea in MeOH and the resulting mixture was refluxed for 3 h to give the title compound (II; R = X = H). II (R = Q, X = Cl) showed IC50 of 2.2 x 10-6 M for inhibiting the blood platelet aggregation of human platelet rich plasma which was induced by thrombin receptor agonist peptide.
IT 173905-79-8P
R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiazolidinone derivs. and analogs as thrombin receptor antagonists)
RN 173905-79-8 CAPLUS
CN Benzamide, 4-chloro-N-[5-(2-naphthalenylmethylene)-4-oxo-3-phenyl-2-thiazolidinylidene]- (CA INDEX NAME)

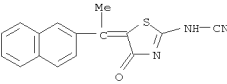
L4 ANSWER 43 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



RN 176529-72-9 CAPLUS
CN Cyanamide, [4,5-dihydro-5-[(6-methoxy-2-naphthalenyl)methylene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)

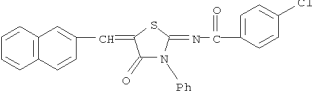


RN 176529-79-6 CAPLUS
CN Cyanamide, [4,5-dihydro-5-[1-(2-naphthalenyl)ethylidene]-4-oxo-2-thiazolyl]- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

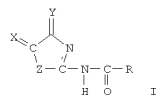
L4 ANSWER 44 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)



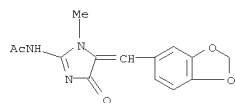
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L4 ANSWER 45 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1993:528107 CAPLUS
DOCUMENT NUMBER: 119:128107
ORIGINAL REFERENCE NO.: 119:22793a,22796a
TITLE: Azoheterocyclic nonlinear optical material
INVENTOR(S): Kawamonzon, Yoshihiro; Mori, Yasushi
PATENT ASSIGNEE(S): Tokyo Shibaura Electric Co, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

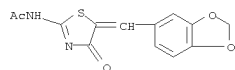
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------------------|----------|-----------------|-------------|
| JP 05002200 | A | 19930108 | JP 1991-248750 | 19910927 |
| PRIORITY APPLN. INFO.: | | | JP 1990-256875 | A1 19900928 |
| OTHER SOURCE(S): | MARPAT 119:128107 | | | |
| GI | | | | |



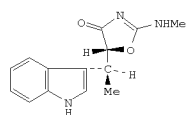
AB The material comprises I [X = CR1R2, NR3; Y = O, S; Z = O, S, SO2, NR4; R = (substituted) aromatic hydrocarbon residue, heterocycle, aliphatic or alicyclic hydrocarbon residue, H; R1-4 = R, functional group; R1 and R2 may form ring]. The material shows high second harmonic generation.
IT 149246-09-3P 149246-14-OP
RL: PREP (Preparation)
(preparation of, nonlinear optical material, with high second harmonic generation)
RN 149246-09-3 CAPLUS
CN Acetamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-1-methyl-4-oxo-1H-imidazol-2-yl]- (CA INDEX NAME)



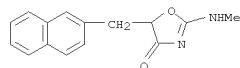
RN 149246-14-0 CAPLUS
CN Acetamide, N-[5-(1,3-benzodioxol-5-ylmethylene)-4,5-dihydro-4-oxo-2-thiazolyl]- (CA INDEX NAME)



L4 ANSWER 46 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1979:197535 CAPLUS
DOCUMENT NUMBER: 90:197535
ORIGINAL REFERENCE NO.: 90:31286h,31287a
TITLE: Interaction of indolmycin in the metabolism of tryptophan in rat liver
AUTHOR(S): Werner, R. G.; Reuter, W.
CORPORATE SOURCE: Abt. Biol. Forsch., Mikrobiol., Dr. Karl Thomae G.m.b.H., Biberach an der Riss, Fed. Rep. Ger.
SOURCE: Arzneimittel-Forschung (1979), 29(1), 59-63
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB When compared with other tryptophan analogs, indolmycin (I) [21200-24-8] is a potent inhibitor of tryptophan pyrrolase [9014-51-1] and tryptophan decarboxylase [9042-64-2], both enzymes involved in tryptophan [73-22-3] catabolism. Otherwise the decarboxylation of 5-hydroxytryptophan [56-69-9] is only slightly affected by I. The I derivative, 2-methylamino-5-(1-naphthylmethyl)oxazolidin-4-one [70020-61-0] demonstrates only a slightly weaker inhibitory effect in the tryptophan-tRNA-ligase system in E. coli, but does not show any significant action on the tryptophan metabolism in the eukaryotic system.
IT 70020-62-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(tryptophan metabolism by liver response to)
RN 70020-62-1 CAPLUS
CN 4(5H)-Oxazolone, 2-(methylamino)-5-(2-naphthalenylmethyl)- (CA INDEX NAME)

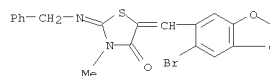


OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L4 ANSWER 45 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)

L4 ANSWER 47 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1976:74185 CAPLUS
DOCUMENT NUMBER: 84:74185
ORIGINAL REFERENCE NO.: 84:12171a,12174a
TITLE: 4-Thiazolidinones. IV. Stereochemistry and reactions of 5-aryliden-4-thiazolidinones
AUTHOR(S): Raouf, A. R. A.; Omar, M. T.; El-Attal, M. M.
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt
SOURCE: Acta Chimica Academiae Scientiarum Hungaricae (1975), 87(2), 187-93
CODEN: ACASA2; ISSN: 0001-5407
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 84:74185
GI For diagram(s), see printed CA Issue.

AB Condensation of 4-thiazolidinone with aldehyde gave I (R = 6-bromo-3,4-methylenedioxyphenyl, 6,3,4-Br(MeO)2C6H2, 5,4,3-Br(HO)(MeO)C6H2, R1 = H, Me, Ph; X = O, S). Some E isomers were also obtained. Condensation of I (R = 6-bromo-3,4-methylenedioxyphenyl, 6,3,4-Br(MeO)2C6H2, 5,4,3-Br(HO)(MeO)C6H2 R1 = H, X = S) with piperidine and morpholine gave II (R2 = piperidine, morpholine). III (R = 6-bromo-3,4-methylenedioxyphenyl, 6-bromo-3,4-dimethoxyphenyl) were obtained from I and PhCH2NH2. I (R = 6-bromo-3,4-methylenedioxyphenyl, 6,3,4-Br(MeO)2C6H2, R1 = H, X = O) and H2NNH2 gave IV, but I (R = 6,3,4-Br(MeO)2C6H2, R1 = Ph, X = O) and H2NNH2 gave H2NNHCONHCONHN:CHCH2R.
IT 58215-71-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 58215-71-7 CAPLUS
CN 4-Thiazolidinone, 5-[(6-bromo-1,3-benzodioxol-5-yl)methylene]-3-methyl-2-[(phenylmethyl)imino]- (CA INDEX NAME)

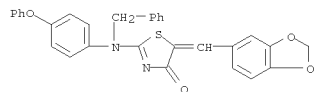


OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L4 ANSWER 48 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1939:57036 CAPLUS
DOCUMENT NUMBER: 33:57036
ORIGINAL REFERENCE NO.: 33:8198C-4,8199a-4,8200a-d
TITLE: The alkyl derivatives of the isomeric o- and p-phenoxyphenylthiazolidones
AUTHOR(S): Roberts, Merritt E.; Dains, F. B.
SOURCE: Univ. Kansas Sci. Bull. (1938), 25, 213-27
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
GI For diagram(s), see printed CA Issue.
AB cf. C. A. 31, 686.2. The effect of the PhO group in both the o- and p-positions has been studied in order to ascertain the influence of this relatively high-mol.-weight radical in 2-arylamino thiazolidones. The stable thiazolidones, S1.C2(NHC6H4OPH).N3.CO4.C5H2, were prepared by (a) heating the thioureas, RNHCSNH2, in alc. with ClCH2CO2Et and (b) heating the o-chlorophenoxyacetanilides, ClCH2CONHCS6H4OPh, with KSCN; modifying the conditions of the latter led to the isolation of the 2-imino or labile form, S1.C2(:NH).N3R.C4O.C5H2. Reduction of p-PhOC6H4NO2, prepared by the Ullman method from PhOK, Cu powder and p-ClC6H4NO2, with Zn and CaCl2 gave p-phenoxyaniline (I), b44 187-9°, m. 83.5°; the latter with PhNCO gave α-p-phenoxyphenyl-β-phenylurea, m. 194°. EtI and I formed p-phenoxyphenylethylamine (II), b32 213-14°, which with PhNCO gave α-p-phenoxyphenyl-α-ethyl-β-phenylurea (III), m. 118°. Treating NH4 p-phenoxyphenylidithiocarbamate with PhNO3 gave 60% p-phenoxyphenyl isothiocyanate, m. 42°, which with excess EtNH2 formed α-p-phenoxyphenyl-β-ethylthiourea (IV), m. 102°, and with PhCH2Cl α-p-phenoxyphenyl-β-benzylthiourea (V), m. 150°. Treating phenoxyphenylbenzylamine, b40 293-305°, prepared from I and PhCH2Cl, with PhNCO gave α-p-phenoxyphenyl-α-benzyl-β-phenylurea, m. 185°. Adding 1.2 mols ClCH2CO2Et to 1 mol I in a mixture of Me2CO and C5H5N (2 mols) gave p-phenoxychloroacetanilide, m. 101°, which upon refluxing for 4 h. with KNO in alc. gave the stable form, 2-p-phenoxyphenylamino-4-thiazolidone (VI), m. 183.5°, also obtained by the action of ClCH2CO2Et on PhOC6H4NHCSNH2; 5-benzal derivative, m. 241°. Acid hydrolysis of VI, using HCl in AcOH, gave I and 2,4-thiazolledione (VII), m. 125°. Alkylation of the Na salt of VI with EtI gave a mixture of 2-(p-phenoxyphenyl)ethylamino-4-thiazolidone (VIII), m. 108°, and the 3-Et derivative of VI, m. 124°, identical with that prepared from IV, ClCH2CO2Et and C5H5N. The position of the Et group in VIII was determined by alkaline hydrolysis with alc. NaOH, giving p-phenoxyphenylethylcyanamide, m. 72°, accompanied by loss of HSCH2CO2H; for further proof the latter was synthesized from II and CNBr. An independent proof of the constitution of VIII was carried out as follows: the 5-benzal derivative, m. 176°, was hydrolyzed by boiling in strong alc. NaOH, giving 5-benzal-2,4-thiazolledione, m. 240°, and III. Treating the Na salt of VI with PhCH2Cl gave 2-(p-phenoxyphenyl)benzylamino-4-thiazolidone, m. 125-6° (3,4-methylenedioxybenzal derivative, m. 133°), whose constitution was proven by the fact that it differed from its isomer, 2-p-phenoxyphenylimino-3-benzyl-4-thiazolidone, m. 108°, prepared from V and ClCH2CO2Et. Treating the Na salt of VI with BzCl gave orange 2-(p-phenoxyphenyl)benzoylamino-4-thiazolidone, m. 165°, which with 10% HCl in an autoclave was hydrolyzed, giving VII, p-PhOC6H4NH2, and BzOH; that the Bz group is at the 2-position is indicated by analogy to the action of Ac2O on 2-phenylimino-4-thiazolidone (cf. C. A. 32, 3396.4). Boiling diphenoxyphenylthiourea and ClCH2CO2Et in alc.-C5H5N or glacial AcOH yielded 2-p-phenoxyphenylimino-3-phenoxyphenyl-4-thiazolidone, m. 131°, 5-benzal derivative, m. 151°. Refluxing 7 g. o-chloro-p-phenoxyacetanilide with 3 g. KSCN in absolute alc. gave the corresponding thiocyno-p-phenoxyacetanilide (IX), m. 106-7°; this thiocyanate could be recrystd. without change from 95% alc., provided the concentration was such that it separated out quickly, but if it was of such concentration that all stayed in solution on cooling, it rearranged after 15 h. to the unstable 2-imino-3-p-phenoxyphenyl-4-thiazolidone (X), m. 132-3°.

L4 ANSWER 48 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
On long standing or boiling in alc. labile X changed to stable VI; under the influence of (CH2)5NH or NaOH in alc., X condensed with BzH, yielding the benzal deriv., m. 174°, which was also obtained from IX and BzH in alc. with (CH2)5NH; the m. p. of this benzal deriv. was lowered by repeated crystn. from alc., due to partial rearrangement to the benzal deriv. of stable VI. X and α-C10H7NCS gave α-(α-naphthyl)-β-2-(3-p-phenoxyphenyl-4-thiazolidone)urea, m. 247°, while the stable isomer VI would not react; 5-benzal deriv. m. 221°. The latter was also obtained from α-C10H7NCS and the unstable benzal deriv. of X. Heating a mixt. of labile X, BzCl and dil. NaOH gave 2-benzoylimino-3-p-phenoxyphenyl-4-thiazolidine, m. 214°; the constitution of the latter was proved by synthesis from ClCH2CO2Et and α-benzoyl-β-p-phenoxyphenylthiourea, m. 128°, which in turn was prepd. from BzNCS and p-PhOC6H4NH2. Refluxing an alc. soln. of o-phenoxyphenylthiourea, m. 124°, prepd. from o-PhOC6H4NH2.HCl and NH4SCN, with ClCH2CO2Et and C5H5N gave the stable 2-o-phenoxyphenylamino-4-thiazolidone (XI), m. 147.5°, while no unstable form was obtained; the Na salt, from C6H6, m. 64°, resolidified and again fused at 236°; 5-benzal deriv. of XI m. 213° and its structure was proved by hydrolysis with 3.5% HCl under pressure to almost quant. yields of o-PhOC6H4NH2 and 5-benzal-2,4-thiazolidone; 5-p-dimethylaminobenzal deriv. of XI m. 230° and was hydrolyzed on boiling with 18% HCl to o-PhOC6H4NH2 and 5-p-dimethylaminobenzal-2,4-thiazolledione, m. 292°. Treating the Na salt of XI with EtI gave only 2-(o-phenoxyphenyl)ethylamino-4-thiazolidone, m. 112°; 5-benzal deriv., orange, m. 210°. Heating o-chloro-o-phenoxyacetanilide, m. 79°, obtained from o-PhOC6H4NH2 and ClCH2COCl in C5H5N, with KSCN in alc. for 20 min.-3 h. gave only the labile form, 2-imino-3-o-phenoxyphenyl-4-thiazolidone (XII), m. 97.5°, and not the expected thiocyanate as in the case of IX. Dry XII can be heated to 130° for 20 min. and even up to 8 h. without change, while longer than 8 h. gave unidentifiable products. This indicates that the 2-imino derivs., which are the labile type, are more stable in the o-series than in the p-series. With dry HCl gas XII gave a salt, m. 242°, which could not be neutralized to give the original compd., but when heated in glacial AcOH with AcONa and BzH gave the benzal deriv. of the stable form XI. Hydrolysis of XII with dil. acid usually gave o-PhOC6H4NH2, HSCH2CO2H and gummy products. However, more or less complete conversion to the stable form (XI) resulted in the following cases: (a) heating at 15 lb. pressure for 20 min. with 2 cc. HCl and 80 cc. H2O, (b) heating a glacial AcOH soln. for 20 min. at 15 lb. pressure, causing almost quant. rearrangement, (c) cooling rapidly a hot aq. soln. of the acid salt of the unstable form and (d) refluxing a short time with alc. KOH, producing partial rearrangement. Hydrolysis of XII by dissolving in 60 cc. alc. and 10 cc. HCl, refluxing for 2 h., and evapg. gave the HCl salt, m. 129°, of o-phenoxyphenylthiohydantoic acid. XII and α-C10H7NCS formed α-(α-naphthyl)-β-2-(3-o-phenoxyphenyl-4-thiazolidone)urea (XIII), m. 129°, which upon heating in alc. with HCl gave, besides some gummy products, di-α-naphthylurea, and the HCl salt, m. 172°, of the naphthylurea of o-phenoxyphenylthiohydantoic acid. XIII and p-Me2NC6H4CHO gave α-(α-naphthyl) - β - 2 - (3 - o - phenoxyphenyl - 5-p - dimethylaminobenzal-4-thiazolidone)urea, m. 209°, which upon acid hydrolysis gave di-α-naphthylurea and 3-o-phenoxyphenyl-5-p-dimethylaminobenzal-2,4-thiazolledione (XIV), m. 167°. XIII likewise condensed with BzH, giving the benzal deriv., m. 227°, which on heating with 18% HCl under pressure hydrolyzed to di-α-naphthylurea and 3-o-phenoxyphenyl-5-benzal-2,4-thiazolledione, m. 178°. Labile XII and PhNCO yielded α-phenyl-β-2-(3-o-phenoxyphenyl-4-thiazolidone)urea (XV), m. 190°; 5-benzal deriv., m. 242°. Treating XV with 60 cc. alc. and 10 cc. HCl under reflux for a short time gave a compd. m. 139° which has the probable formula PhOC6H4NHC(:NCONHPh)SCH2CO2H.HCl. A mixt. of XII, BzCl and NaOH soln. gave 2-benzoylimino-3-o-phenoxyphenyl-4-thiazolidone (XVI), m. 164°. Treating o-PhOC6H4NH2 with BzNCS gave

L4 ANSWER 48 OF 48 CAPLUS COPYRIGHT 2011 ACS on STN (Continued)
α-o-phenoxyphenyl-B-benzoylthiourea, m. 172°, which failed to give XI with ClCH2COCl and hence proof of structure as in the case of the corresponding p-deriv. was not realized. Hydrolysis of XVI with dil. HCl gave the HCl salt of o-phenoxythiohydantoic acid. XVI and p-Me2NC6H4CHO gave 2-benzoylimino-3-o-phenoxyphenyl-5-p-dimethylaminobenzal-4-thiazolidone, m. 233°, which was also obtained by condensing labile XII and p-Me2NC6H4CHO and then reacting with BzCl; hydrolysis in acid soln. eliminated the Bz group and gave XIV.
IT 854477-15-9P, 4(5)-Thiazolone,
2-(N-benzyl-p-phenoxyanilino)-5-piperonylidene-
RL: PREP (Preparation)
(preparation of)
RN 854477-15-9 CAPLUS
CN 4(5H)-Thiazolone, 5-(1,3-benzodioxol-5-ylmethylene)-2-[(4-phenoxyphenyl)(phenylmethyl)amino]- (CA INDEX NAME)



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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

289.72

487.32

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-41.76

-41.76

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 19:55:13 ON 01 MAR 2011